100

Document Control

DC

DOCUMENT CONTROL

Memo

91388

Page 1

October-05-12 11:24:42 AM D350-636-012 Accept *N900040100* Setup Start **Revision ID:** Item Name: Skidtube RH **Start Date:** 05/10/2012 Start Qty: 1.00 **Cust Item ID:** Required Date: 19/10/2012 Req'd Qty: 1.00 **Customer:** Reference: Run Process Plan: ML5 Date: 12-10-05 Tooling: Approvals: Date: QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool # Plan Tool ID Reject Accept Reject **Work Center ID** Description Run Hours Qty Code Qty Number **Draw Nbr Revision Nbr** D2750 F D3492 C 0.00

Photocopy blue file and type labels per PPP D350-636-012 $\,$ CHG 006 $\,$

\$ 40 mus 12-10-31

Insp.

Stamp

| | | | | | | | | | | | DQA. | Date. | |
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| NCR: | ⁄es | / No | | | | WORK ORDER NON- | COI | NFORM | /IANCE / UPD | ATE | | | • |
| | | | | | ±11. | | | | | | QA Closed: | Date: | |
| Work Orde | ٦r٠ | | | | | DISPOSITION | | | | AGAINST DE | PARTMENT | /PROCESS | |
| Part N | - . No. | | 1.01. | | | Rework Scrap Use-as-is Work Order Update | | Therm | Skid-tube Machining noforming Large Fab | Crosstube Small Fab Finishing Composite | - | Water Jet d. Eng. Coor. re/Packaging Supplier | Engineering Quality Other |
| Root | | | | | Descri | ption of work order update | | Initial | Acti | on | Sign & | | |
| Cause | | Date | Step | Qty | (| or Non-conformance | Cł | nief Eng | Descri | ption | Date | Verification | QC Inspector |
| Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved | | | | | | . , | | | | | | | |
| | | | | | | | FAU | LT CATE | GORY | | | | |
| Landi | anding Gear Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube | | | | | General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short | | - | on Incomplete ions Incomplete/U nance led | Inclear | Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned V | ct issing Wrong | Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other |
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Offset

Out of Calibration

Out of Sequence

Outside Dimensions

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Page 2

October-05-12 11:24:42 AM Item ID: D350-636-012 Accept *N900040100* **Revision ID:** Item Name: Skidtube RH **Start Date:** 05/10/2012 Start Oty: 1.00 Cust Item ID: **Required Date:** 19/10/2012 Req'd Qty: 1.00 Customer: Reference: Process Plan: Approvals: Date: Tooling: Date: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID **Work Center ID** Description **Run Hours** 110 0.00 Skidtubes *110* Skidtubes 0.00 Memo Skidtubes 1- Pick D2600-3 Bent 2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D2750 3- Drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500", deburr. 4- Locate DT8329 off of blade fitting bolt holes and drill pilot holes for blade fitting 5- Drill only two fwd step holes using DT9616. Ensure proper positioning. 6- Drill pilot holes as per Dwg D2750 sheet 4 (D2750-2 details). Drill using drill Jig DT8150 & DT8863A for first side only DT8863B for second side (detail K) 7- Clecko DT8863B on second side of tube and drill pilot holes for detail B. ***SECOND SIDE*** 8-Open up holes for Detail "K" to 0.375" (4 holes per side)and blade fitting location holes to 0.500" (total of 4 holes per side) as per dwg D2750. Open up holes for ground handling and detail L to 0.500" (8 holes per side) 9-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 open to 0.297". 10-Open up holes of Detail A to 0.297" (total of 2 holes per side)

Setup Start

Start

Stop

Reject

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Accept

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Tool # Plan

Code

| | | | | | | | | | | DQA: | Date: | |
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| Cause | Da | te Ste | p Qty | | or Non-conformance | Ch | nief Eng | Desci | ription | Date | Verification | QC Inspector |
| Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved | | | | | | | | | | | | |
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| Landi | anding Gear Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube | | | | General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short | | Instruct Mainte Mislabe Misreac | on Incomplete ions Incomplete/l nance led | Unclear | Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned V Power Loss, | ct sissing Wrong | Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other |
| | aqiA 📗 | les in Bend | | | Drill Holes | | Offset | | | | | |

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

130

QC5- Inspect part completeness to step on W/O

0.00

12/10/12

QC

Quality Control

Memo

Memo

0.00

Quality Control

Page 3

| | | | | | | | | | | | DQA: | Date | e: |
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| Cause | | Date | Step | Qty | | or Non-conformance | 1 | ief Eng | | ription | Date | Verification | QC Inspector |
| Doc/Data | | | <u> </u> | | | | | | | • | | | |
| Equip/Tooling | | | | | | | | | | | | | |
| Operator | П | | | | | | | | | | | | |
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| Setup | П | | | | | | | | | | | | |
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| Process | | | | | | | - | | | | | | |
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| Training | | | | | | | | | | | | | |
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| Landi | ng G | Sear | | | | General | | | | | 5 | _ | |
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| | | Cracks | | | | Broken/Damaged | | Inspect | ion Incomplete | | Part Incorre | ct | Weld |
| Crushed/Crimped Burrs | | | | | | Burrs | | Instruct | ions Incomplete/ | 'Unclear | Part Lost/M | issing | Wrong Stock Pulled |
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| | Ш | Heat Trea | at | | | Countersink | | Mislabe | eled | ļ | Positioned \ | V rong | |
| | | Inspectio | | Tube | | Cut Too Short | | Misrea | t | | Power Loss, | 'Surge | Other |
| | Ш | Ripples in | Bend | | | Drill Holes | | Offset | | | | | |
| | | Torque W | aves in E | xtrusio | n | Drawing | | Out of | Calibration | | | | |

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

October-05-12 11:24:42 AM

91388

Page 4

Item ID: D350-636-012 Accept *N900040100* Setup Start **Revision 1D:** Item Name: Skidtube RH **Start Date:** 05/10/2012 Start Qty: 1.00 **Cust Item ID: Required Date:** 19/10/2012 Req'd Qty: 1.00 **Customer:** Reference: Run Process Plan: Approvals: Tooling: Date: Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Tool # Plan Set Up/ Tool ID Accept Reject Reject Insp. **Work Center ID** Description **Run Hours** Code Oty Number Stamp Qty 140 Chemical Conversion Coat per QSI005 4.1 0.00 *140* HandFinish 0.00 Memo Hand Finishing 150 DAS 21 289 QC7-Inspect Chemical Conversion Coat 0.00 *150* B 12/10/18 QC 0.00 Memo Quality Control

| . 45 | | | | | | | | | | | DQA: | Date: | • " |
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| Work Orde | er. | | | | | DISPOSITION | | | | AGAINST DE | PARTMENT | PROCESS | |
| Part I | No | | | | 1.1 | Rework Scrap Use-as-is Work Order Update | | , N Therm | Skid-tube Machining noforming Large Fab | Crosstube Small Fab Finishing Composite | 4 | Water Jet d. Eng. Coor. re/Packaging Supplier | Engineering Quality Other |
| Root | | | | | Descri | ption of work order update | Į į | nitial | Act | ion | Sign & | | |
| Cause | D | ate | Step | Qty | | or Non-conformance | Ch | ief Eng | Desci | ription | Date | Verification | QC Inspector |
| Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved | | | | | | , | | | r | | | | |
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| Landi | ng Gear | | | | | General | | | | _ | 3 | _ | 7 |
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Out of Sequence

Outside Dimensions

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Wave/Twist in Tube

Torque Waves in Extrusion

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October-05-12 11:24:42 AM Item ID: D350-636-012 Accept *N900040100* Setup Start Revision ID: Item Name: Skidtube RH **Start Date:** 05/10/2012 Start Qty: 1.00 **Cust Item ID: Required Date:** 19/10/2012 Rea'd Otv: 1.00 **Customer:** Reference: Run Start Approvals: Process Plan: Date: Tooling: Date: Stop Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Insp. Work Center ID Description **Run Hours** Code Otv Qty Number Stamp 160 0.00 *160* Skidtubes Skidtubes 0.00 Skidtubes 1-Open up holes of Detail L and ground handling to 0.625" (total of 8 holes per side) as per dwg D2750. 2-Open up holes of Detail K to 0.750" (total of 4 holes per side) as per dwg D2750. 3-Open float holes to .500" (4 per Side) BB 12/10/18 4-Chamfer holes of Detail K, L, ground handling and float holes per dwg D2750 (welding instructions on sheet 9) 5-Deburr and blow out all chips from inside of tube 6-Prepare tube for welding, remove alodine as required. 7-Bond web D2739 in place as per OSI 015 \$ 12/10/18 A/R Sikaflex-291 exp. date: 13 06 22 8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004 (welding instructions on sheet 9) A/R Aluminum Rod batch: W122357 9- At section AP-AP drill out x-bolt spacer to 0.404" 10-Grind welds flush as per Dwg D2750

11-Spot face ground handling holes section (total of 4 places per side) as per

| | | | | | | | | | DQA: | Date: | |
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| NCR: Y | es / No | | | | WORK ORDER NON- | CONFOR | MANCE / UPD | | QA Closed: | Date: | • |
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| Work Orde Part N NCR N | o | | | | Rework Scrap Use-as-is Work Order Update | Ther | Skid-tube Machining moforming Large Fab | Crosstube Small Fab Finishing Composite | ì | Water Jet d. Eng. Coor. re/Packaging Supplier | Engineering Quality Other |
| Root Cause | Date | Step | Qty | | iption of work order update or Non-conformance | Initial Chief En | Acti Descri | | Sign & Date | Verification | QC Inspector |
| quip/Tooling Operator Material Detup Other Process Supplier Training Unapproved | | | | | ÷ | | | | | | |
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| Landin | Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion | | | | General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes | Instru Main Mislal Misre | vare ction Incomplete ctions Incomplete/U tenance peled ad | Jnclear | Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned V | ct issing Wrong | Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other |
| | i | Waves in I Sequence | | ı | Drawing Finish | | f Calibration f Sequence | | | <u> </u> | |

Outside Dimensions

Wave/Twist in Tube

| October-05-12 | 11:24:42 AM | , | | 9 | 1.388" | | | | | | Page 6 |
|--------------------------------|--------------|---------------------------|------------------------|---------------------|-----------------|-----------|--------------|---------------|---------------|------------------|--------|
| Item ID: Revision ID: | D350-636-0 | 12 | | Accept | *N900 | 040 | 1100 |)* | Setup Sta | ırt * | NS1* |
| Item Name: | Skidtube RH | | | | | | | | Sto | op * | NS2* |
| Start Date: | 05/10/2012 | Start Qty: 1.00 | *1* | | Cust Item I | D: | | | | | u.)/ |
| Required Date Reference: | : 19/10/2012 | Req'd Qty: 1.00 | *1* | | Customer: | | | | | | |
| Approvals: | Process Pla | ın: | Date: | Tooling: | Da | - ate: | | 1 | Run Sta | ^{irt} * | NR1* |
| | QC: | | Date: | SPC (Y/N): | | ate: | | | Sto | ^{op} * | NR2* |
| Sequence ID/ Work Center I | D | Operation Description | | Set Up/ Run Hour | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Rejec Numb | |
| | | dwg D2750 12-Deburr ho | oles | | | 3 12 | 10/2 | 5 | | | |
| 170 | | QC10- Inspect visual per | QSI004- ground welds | 0.00 | 1 0 | | · | | | | |
| *170* QC Quality Control | | Мето | | 0.00 | s Mulss | | | | - | - = | |
| | | | | | | | | | | • | |
| 180 | | QC5- Inspect part comple | eteness to step on W/O | 0.00 | | | | | | | |
| *180* QC Quality Control | | Memo | | 0.00 | As 6 12/1925 | | | | | - | |

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| NCR: Y | Yes / N | lo | | | WORK ORDER NON-O | COI | VFORM | MANCE / UP | DATE | | | |
| | | | | | | | | | · | QA Closed: | Date: | |
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| Work Orac | | | | | Rework | 1 | | Skid-tube | Crosstube |] | Water Jet | Engineering |
| Part N | No. | | | | Scrap | 1 | | Machining | Small Fab | Pro | d. Eng. Coor. | Quality |
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| | Crack | | | | | | | | | Weld | | |
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| | Cuffs | | | | Contamination | <u></u> | Mainte | | ļ | Part Moved | | |
| | Heat | Treat | | | Countersink | L | Mislabe | eled | | Positioned ' | Wrong | _ |
| | Inspe | ction Strip | in Tube | | Cut Too Short | | Misread | t | | Power Loss, | /Surge | Other |
| | Rippl | Ripples in Bend Drill Holes Offset | | | | | | | | | | |

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

0.00

Memo

Inspect for foreign object per OSI 024

& @ 12/10/26

210

Quality Control

| | | | | | | | | | | | DQA: | Date: | |
|---------------------------------------|-------|-----------|-----------|----------|--------------|----------------------------|-----|---------|---------------------|------------|--------------|---------------|--------------------|
| NCR: | es , | / No | | | | WORK ORDER NON-O | 100 | NFORM | /IANCE / UP | DATE | | | |
| | | | | | | | | | | | QA Closed: | Date: | |
| Maril Ond | | | | | | DISPOSITION | i | | | AGAINST DE | PARTMENT, | PROCESS | |
| Work Orde | er: — | | | | | Rework | 1 | | Skid-tube | Crosstube |] | Water Jet | Engineering |
| Part N | ماه | | | | | Scrap | | | Machining Vachining | Small Fab | Dro | d. Eng. Coor. | Quality |
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| | Щ | Centre No | ot Concei | ntric to | o/s | BOM/Route | | Hardwa | re | | Over/Under | tolerance | Temperature/Cure |
| | Щ | Cracks | | | | Broken/Damaged | | Inspect | on Incomplete | | Part Incorre | - | Weld |
| | | | | | | | | | ions Incomplete/ | /Unclear | Part Lost/M | issing | Wrong Stock Pulled |

Maintenance

Out of Calibration
Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Contamination Countersink

Cut Too Short

Drill Holes

Drawing

Finish Folio Part Moved

Positioned Wrong

Power Loss/Surge

Other

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Cuffs

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Insp.

Stamp

October-05-12 11:24:42 AM Item ID: D350-636-012 Accept *N900040100* Setup Start **Revision ID:** Item Name: Skidtube RH **Start Date:** 05/10/2012 Start Oty: 1.00 Cust Item ID: **Required Date:** 19/10/2012 Req'd Qty: 1.00 **Customer:** Reference: Run Start **Process Plan: Approvals:** Date: __ Tooling: Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Accept Reject Reject Work Center ID **Description Run Hours** Code Qty Number Qty 230 0.00 *230* HandFinishing HandFinish 0.00 Memo RH Hand Finishing 1-Install inserts as per dwg D2750 2-Inspect for Foreign Objects 3-Spray inside of tube with "LPS-3" batch: M/A 4-Install blade fitting D3488-042, wearshoes and ground handling hardware as per dwg D2750 SIKA FLEX 241 BATCH: 123025 EXP DATE: 13103 5-assemble o'ring to plug as per dwg D3492 and apply o'ring lube

A/R 55-o'ring lube batch: 121651

batch: 114596

6-Coat all exposed fasteners with "LPS Procyon"

| | | DQA: | Date: ' | ** |
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| NCR: Yes / No | WORK ORDER NON-CONFORMANCE / UPDATE | | | |
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| | | | QA Closed. Date. | | | | | | | | | | | |
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| Work Orde | er: | | | | | DISPOSITION | | | | AGAINST DE | EPARTMENT | /PROCESS | | |
| Part N | - | | | - | | Rework Scrap | | | Skid-tube Machining | Crosstube Small Fab | Dro | Water Jet od. Eng. Coor. | \vdash | Engineering Quality |
| raili | ٧U. | | | | | Use-as-is | | | noforming | Finishing | ⊣ | re/Packaging | - | Other |
| NCR N | No. | | | | | Work Order Update | | | Large Fab | Composite | 1 1,60,310 | Supplier | _ | |
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| Root | | | | | Descri | ption of work order update | | nitial | Ad | ction | Sign & | | | |
| Cause | | Date | Step | Qty | 4 | or Non-conformance | Ch | ief Eng | Desc | cription | Date | Verificatio | n | QC Inspector |
| Doc/Data | | | | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | | | | |
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| Material | Ш | | | | | | | | | | | | | |
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| Landi | ng C | iear | | | | General | | | | | _ | | | |
| | | Bending | | | | Bend | | Grain | | | Ovalized | | | Pressure/Forced |
| | | Centre No | ot Concer | ntric to | o/s | BOM/Route | | Hardwa | ire | | Over/Unde | r tolerance | | Temperature/Cure |
| | | Cracks | | | | Broken/Damaged | | Inspect | ion Incomplete | | Part Incorre | ect | | Weld |
| | | Crushed/0 | Crimped. | | | Burrs | | Instruct | tions Incomplete | /Unclear | Part Lost/N | 1issing | | Wrong Stock Pulled |
| | | Cuffs | | | | Contamination | | Mainte | enance | | Part Moved | d | | - |
| | | Heat Trea | t | | | Countersink | | Mislabe | eled | | Positioned | Wrong | | _ |
| | П | Inspection | n Strip in | Tube | | Cut Too Short | | Misread | | | Power Loss | /Surge | | Other |
| | | Ripples in | Bend | | | Drill Holes | Offset | | | | _ | | | |
| | П | Torque W | aves in E | xtrusio | n \lceil | Drawing | | Out of | Calibration | | | | | |
| | П | Turning So | equence | | | Finish | | Out of | Sequence | | | | | |
| | | Wave/Tw | ist in Tuk | oe . | | Folio | | Outside | Dimensions | | | | | |

260

260

Quality Control

QC4-100% Inspect kits for completeness

Memo

| | | | | | | | | | | DQ | A: Da | ite: | |
|---------------|---------|---------------|----------|---|----------------------------|---|----------|-----------|------------|-----------|-----------------|------|--------------------|
| NCR: Y | es / No |) | | | WORK ORDER NON-C | 100 | NFORM | ANCE / UP | DATE | | | | |
| | ·· | | | | | | | | | QA Close | d: Da | ite: | |
| Work Orde | or. | | | | DISPOSITION | | | | AGAINST DE | PARTMEN | IT/PROCESS | | |
| Work Orac | | | | | Rework | 1 | | Skid-tube | Crosstube | | Water Jet | | Engineering |
| Part N | No. | | | | Scrap | 1 | | Machining | Small Fab | P | rod. Eng. Coor. | _ | Quality |
| | - | | | | Use-as-is | 1 | | noforming | Finishing | Rec/S | tore/Packaging | :[| Other |
| NCR N | ۱۰. | | | | Work Order Update |] | | Large Fab | Composite |] | Supplier | | |
| Root | | | | Descri | ption of work order update | | Initial | Ac | tion | Sign & | | | |
| Cause | Date | Step | Qty | . (| or Non-conformance | Ch | nief Eng | Desc | ription | Date | Verification | n | QC Inspector |
| Doc/Data | | | | | | | | | | 1 | | | |
| Equip/Tooling | | | | | • | | | | | | | | |
| Operator | | | | | | | | | | | | | |
| Material | | | | | | | | | | | | | |
| Setup | | | | | | 7 |) | 1 | | | | | |
| Other | | | | | | 1 | | | | | ļ | | |
| Process | | | | | | 1 | | | | | | | |
| Supplier | | | 1 | | | | ! | | | | | | |
| Training | | | | | | 1 | | • | | | | | |
| Unapproved | | | | | | | | | | | | | |
| | | | | | F | AUL | T CATE | GORY | | | | | |
| Landi | ng Gear | | | | General | | - | | | _ | | _ | - |
| : | Bendin | g | | | Bend | | Grain | | | Ovalized | | | Pressure/Forced |
| | Centre | Not Conce | ntric to | o/s | BOM/Route | | Hardwa | re | | Over/Und | ler tolerance | L | Temperature/Cure |
| | Cracks | | | Broken/Damaged Inspection Incomplete Part Incorrect | | | | | | | Weld | | |
| | Crushe | d/Crimped | | | Burrs | Instructions Incomplete/Unclear Part Lost/Missing | | | | | | | Wrong Stock Pulled |
| | Cuffs | | | | Contamination | | Mainte | nance | | Part Mov | ed | | |
| | Heat T | reat | | | Countersink | | Mislabe | led | | Positione | d Wrong | | _ |
| | Inspect | tion Strip ir | 1 Tube | | Cut Too Short | | Misread | i | | Power Lo | ss/Surge | | Other |
| | Ripples | in Bend | | | Drill Holes | | Offset | | | | | | |

Out of Calibration
Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

91388

Work Order ID 91388 October-05-12 11:24:42 AM Item ID: D350-636-012 Accept *N900040100* Setup Start **Revision ID:** Item Name: Skidtube RH **Start Date:** 05/10/2012 Start Qty: 1.00 **Cust Item ID: Required Date:** 19/10/2012 Req'd Qty: 1.00 **Customer:** Reference: Run Start Approvals: **Process Plan:** Date: **Tooling:** Date: Stop QC: Date: ___ SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool # Plan Tool ID Accept Reject Reject Work Center ID Description **Run Hours** Code Qty Qty Number Stamp 270 Packaging *270* Packaging Memo Packaging Package as per PPP D350-636-012

280

280 QC

Quality Control

QC21- Final Inspection - Work Order Release

Memo

0.00

0.00

Insp.

| | | | | | | | | | | | DQA: | Date | : . |
|---|--|------------|------|-----|--------|--|--|--|--|------------|--|-----------------------|--|
| NCR: | Yes | / No | | | | WORK ORDER NON-O | 100 | NFORM | MANCE / UP | DATE | 016 | | • |
| · · · · · · · · · · · · · · · · · · · | | | | | | T *** | | | | | QA Closed: | Date | : |
| Work Orde | er: | | | | | DISPOSITION | | | | AGAINST DE | PARTMENT | /PROCESS | |
| | - _ No. | | | | | Rework Scrap Use-as-is Work Order Update | Skid-tube Crosstube Water Jet Machining Small Fab Prod. Eng. Coor. Thermoforming Finishing Rec/Store/Packaging Large Fab Composite Supplier Initial Action Sign & Verification Chief Eng Description Date Verification | | | | | | Engineering Quality Other |
| Root | | | | | Descri | ption of work order update | | nitial | Act | tion | Sign & | | |
| Cause | | Date | Step | Qty | C | or Non-conformance | Ch | ief Eng | Desc | ription | Date | Verification | QC Inspector |
| Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved | | | | | | | | | | | | | |
| | | | | • | | F | AUL | T CATE | GORY | | | | |
| Landi | Bending Centre Not Concentric to O/S BOM/Ro Cracks Broken/I Crushed/Crimped Burrs Cuffs Contamin Heat Treat Counters | | | | | BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short | | Instruct Mainte Mislabe Misread | on Incomplete ions Incomplete/ nance iled | Unclear | Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned V | ct issing Wrong | Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other |
| | | Ripples in | Bend | | 1 | Drill Holes | | Offset | | | | | |

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Picklist Print

October-05-12 11:24:47 AM

Work Order ID: 91388

Parent Item: D350-636-012

Parent Item Name: Skidtube RH

91388
D350-636-012

Start Date: 05/10/2012

Start Qty: 1.00

Required Date: 19/10/2012

Required Qty: 1.00

Comments:

IPP Rev:102.09.25Rearranged procedure stepsKJ

IPP Rev:J 06-03-29 As per Rev D EC IPP Rev:K 06-07.13 As per dsi9343 EC

IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verified By:EC

IPP Rev:M 08-04-22 update steps 4.13 DD verified by:EC

Manufactured

No

IPP Rev:N 08-09-23 revF as per dwg DD verified by:ec IPP Rev:O 10.06.22 revise seq110 DD verf.EC IPP Rev:P 10.10.01 as

per IIN revH DD verf:EC

| T/ BT | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|--------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D2600-3-BENT | | Manufactured | No | | | 110 | Each | 23.0000 | 1 | 1 | | | |
| *D2600-3-P | RENT* | | | | | | | | ** | (1)- | 12 | 10/1 | |

Extrusion Bent

| Location | Lo | c Qty | Loc Code | | | |
|-----------------|-----|-------|----------|---|---|---|
| LG | | 23 | | | | |
| 66875 | | 7 | | | | |
| 73253 | | 1 | | | | • |
| 75021 | | 1 | | | | |
| 75022 | | 1 | | | | |
| 75023 | | 1 | | | | |
| 81330 | | 4 | | | | |
| 83305 | | 1 | | | | |
| 88712 | | 5 | | | | |
| 90251 | | 2 | | | | |
| | 110 | Each | 32.0000 | 1 | 1 | |

**

D2744

 Location
 Loc Oty
 Loc Code

 LG002
 32

 62715
 1

 85506
 31

BE12-10-16

| | | | | | | | | | | | | DQA: | Dat | te: | |
|------------------------|------|-----------|------------|----------|------------------|--------------------------------|----------|--|---------------|------------------|--------------------|-------------------------|-------------|-------|------------------|
| NCR: Y | es , | / No | | | | WORK ORDER NON-C | 100 | NFORM | MANCE / UP | DATE | | | | | |
| | | | | | | | | | | | (| QA Closed: | Dat | te: | |
| Work Orde | er: | | | | | DISPOSITION | | | | AGAINST D | EP | ARTMENT/ | PROCESS | | |
| | _ | | | | | Rework Skid-tube Crosstube | | |] | Water Jet | | | Engineering | | |
| Part N | No | | | | ··· | Scrap | | Machining Small Fab | | | | d. Eng. Coor. | Quality | | |
| NCR N | No | | | | | Use-as-is Work Order Update | | Thermoforming Finishing Rec/S Large Fab Composite | | | Rec/Stor | e/Packaging Supplier | | Other | |
| Root | | | | | Descri | ption of work order update | | nitial | Ac | tion | T | Sign & | | | |
| Cause | | Date | Step | Qty | (| or Non-conformance | Ch | ief Eng | Desc | ription | | Date | Verificatio | n | QC Inspector |
| Doc/Data | | | | | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | | İ | | 1 | |
| Operator | | | | | | | ł | | | | ۱ | | | | |
| Material | | | | | | | 1 | | | | 1 | | | l | |
| Setup | | | | | | | | | | | ۱ | | | | |
| Other | | | | | | | l | | | | | | | | |
| Process | | | | | | | | | | | | | | | |
| Supplier | | | | | | | | | | | - | | | , | |
| Training | | | | | | | | | | | | | | | |
| Unapproved | | | | | | | <u> </u> | | | | | | | | |
| | | | | | | F | AUI | T CATE | GORY | | | | | | |
| Landi | | | | | | General | | 1 | | _ | _, | | | _ | 1 |
| | | Bending | | | | Bend | <u></u> | Grain | | | -1 | Ovalized | | L | Pressure/Forced |
| | | Centre No | ot Concer | ntric to | O/S BOM/Route | | | Hardwa | re | | ╝ | Over/Under | tolerance | | Temperature/Cure |
| | —— | racks | | | | Broken/Damaged | L | Inspecti | on Incomplete | | | Part Incorred | ct | | Weld |
| Crushed/Crimped. Burrs | | | | Instruct | ions Incomplete/ | Unclear | | Part Lost/Mi | ssing | | Wrong Stock Pulled | | | | |
| | | uffs | | | | Contamination | L | Mainte | nance | Ĺ | Part Moved | | | | |
| | ۲ | leat Trea | t | | | Countersink | | Mislabeled | | | Positioned Wrong | | | | _ |
| | li | nspection | n Strip in | Tube | | Cut Too Short | Misread | | | Power Loss/Surge | | | | Other | |

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Picklist Print

October-05-12 11:24:47 AM

Work Order ID: 91388

Parent Item:

D2739

D350-636-012

Parent Item Name: Skidtube RH

91388 *D350-636-012*

> 72155 81508

Location

LG

Start Date: 05/10/2012

Required Date: 19/10/2012

Start Qty: 1.00

Required Qty: 1.00

Loc Code

5.0000

**

350 I Beam

D2739

D2743

D2743 Crossbolt Spacer

Manufactured

Manufactured

85487 86615

160

87734 160 Each

Each

Loc Qty

235.0000

**

BE 12-10-24

| Location | Loc Q | <u>ty</u> | Loc Code | | | |
|-----------------|-------|-----------|----------|----|---|-------------|
| LG | 1 | 61 | | | | |
| 81965 | | 23 | | | | |
| 83262 | | 2 | | | | |
| 85459 | | 14 | | | | |
| 88504 | 1 | 22 | • | | 8 | |
| LG001 | | 74 | | | _ | |
| 67766 | | 4 | | | | |
| 68251 | | 3 | | | | |
| 73403 | | 64 | | | | |
| 74445 | | 1 | | | | |
| 79517 | | 2 | | | | |
| | 160 | Each | 34.0000 | 4 | 4 | |
| | | | • | ** | _ | BG 12-10-24 |

D3490-3

D3490-3 Cross Bolt Spacer

Manufactured

Location

86980

LG001

Loc Qty 34

34

Loc Code

October-05-12 11:24:47 AM

Shop Packet Print

Page 2

| NCR: Y | es / No | | | | WORK ORDER NON- | CON | IFORN | MANCE / UP | DATE | QA Closed: | Date: | • |
|---------------------------------|------------|------------|------------|----------|--------------------------------|--------------------------------------|---------|---------------------|---------------------|--------------|-----------------------|--------------------|
| Work Orde | ·r· | | | | DISPOSITION | | | | AGAINST DE | PARTMENT, | /PROCESS | |
| Part N | | | | | Rework Scrap | Machining Small Fab Prod. Eng. Coor. | | | | | Engineering Quality | |
| NCR N | lo | | | | Use-as-is Work Order Update | _ | | noforming Large Fab | Finishing Composite | Rec/Sto | re/Packaging Supplier | Other |
| Root | | | | | ption of work order update | ı | nitial | | tion | Sign & | _ | 1 |
| Cause | Date | Step | Qty | | or Non-conformance | Chi | ief Eng | Desc | cription | Date | Verification | QC Inspector |
| Doc/Data Equip/Tooling Operator | | | | | | | | | | | | |
| Material | | | | | | | | | | | | |
| Setup | = | | | | | | | | | | | |
| Other | | | | | | | | | | | | |
| Process | | | | | | | | | | | | |
| Supplier | | | | | | | | | | | | |
| Training | | | | | | | | | | | | |
| Unapproved | | | | | | | | | | | | |
| | | | | | F | AUL | T CATE | GORY | | | | |
| Landir | ng Gear | | | | General | | | | | _ | _ | _ |
| | Bending | | | | Bend | | Grain | | | Ovalized | | Pressure/Forced |
|] | Centre No | ot Conce | ntric to C |)/s | BOM/Route | | Hardwa | re | | Over/Under | tolerance | Temperature/Cure |
| | Cracks | | | <u> </u> | Broken/Damaged | \vdash | | on Incomplete | : | Part Incorre | | Weld |
| | Crushed/ | Crimped | | _ | Burrs | - | | ions Incomplete, | 'Unclear | Part Lost/M | issing | Wrong Stock Pulled |
| | Cuffs | | | | Contamination | \vdash | Mainte | | | Part Moved | | |
| ļ | Heat Trea | | | | Countersink | - | Mislabe | | | Positioned V | _ | 7 |
| | Inspectio | | Tube | | Cut Too Short | \vdash | Misread | i | <u></u> | Power Loss/ | Surge | Other |
| 1 | Ripples in | | | | Drill Holes | - | Offset | | | | | |
| | Torque W | | | <u> </u> | Drawing | \vdash | | Calibration | | | | |
| 1 | Turning S | | | | Finish | | | Sequence | | | | |
| | Wave/Tw | ist in Tul | oe e | | Folio | | Outside | Dimensions | | | | |

DQA:

Date:

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Picklist Print

October-05-12 11:24:47 AM

Work Order ID: 91388

Parent Item:

D350-636-012

Parent Item Name: Skidtube RH

91388 *D350-636-012*

Start Date: 05/10/2012

Required Date: 19/10/2012

Start Qty: 1.00

Required Qty: 1.00

D3490-1

D3490-1

Cross Bolt Spacer

Manufactured

160

Each

97.0000

**

BE12-10-24

| Location | <u>n</u> | Loc Oty | Loc Code | | |
|----------|----------|---------|--------------|---|---|
| LG | | 88 | | | |
| | 81976 | 2 | | | |
| | 86979 | 32 | | | |
| | 88617 | 54 | | | 4 |
| LG001 | | 9 | | | |
| | 62450 | 2 | | | |
| | 74875 | 4 | | | |
| | 77042 | 3 | | | |
| | | 230 Ea | ach 127.0000 | 8 | 8 |

D3631-1

D3631-1

No

Manufactured

** 8 D 12/10/25

| Location | | Loc Qty | Loc Code | |
|----------|-------|---------|----------|---------------------------------------|
| FG | 91606 | 28 | | 4 |
| | 81874 | 2 | | - |
| | 83588 | 26 | | |
| FP-A | | 84 | | |
| | 89277 | 84 | | Ч |
| ST072 | | 15 | | · · · · · · · · · · · · · · · · · · · |
| | 68062 | 2 | | |
| | 75548 | 13 | | |

| | | | | | | | | | | | DQA: | Date | e: | · · · · · · · · · · · · · · · · · · · |
|---|-----------------------------|------------------------|-----------------------------------|--------------|-----|---|------------|--------------------|---|------------------|--------------|--|----------|---------------------------------------|
| NCR: | Yes | / No | | | | WORK ORDER NON-O | O | NFORM | MANCE / UPD | ATE | | | | • |
| | | | | | | | | | | | QA Closed: | Date | e: | ··· |
| Work Ord | er. | | | | | DISPOSITION | | } | | AGAINST DE | PARTMENT | /PROCESS | | · |
| Part I | No. | | | | | Rework Scrap Use-as-is Work Order Update | | f Therm | Skid-tube Crosstube Small Fab Thermoforming Finishing Composite | | | Water Jet d. Eng. Coor. re/Packaging Supplier | | Engineering Quality Other |
| | | | | | | | | | | | | | _ | |
| Root | | | | | | ption of work order update | 1 | Initial | Actio | | Sign & | | | |
| Cause | , | Date | Step | Qty | (| or Non-conformance | Cr | nief Eng | Descri | ption | Date | Verification | \perp | QC Inspector |
| Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved | | | | | | | | | | | | | | |
| | | | | | | F. | AUI | LT CATE | GORY | | , | | | |
| Landi | | iear Bending | | | | General Bend | | Grain | | | Ovalized | | - | Pressure/Forced |
| | | Centre No | ot Concer | ntric to (| o/s | BOM/Route | | Hardwa | re | | Over/Unde | r tolerance | <u> </u> | Temperature/Cure |
| | | Cracks | | | | Broken/Damaged | | Inspecti | on Incomplete | | Part Incorre | ct [| \ | Weld |
| | | Crushed/ | Crimped. | imped. Burrs | | | | Instruct | ions Incomplete/Ui | nclear | Part Lost/M | lissing | \ | Wrong Stock Pulled |
| | Cuffs | | | | | Mainte | nance | | Part Moved | _ | | | | |
| | | Heat Treat Countersink | | | | | Mislabeled | | | Positioned Wrong | | | | |
| | | Inspectio | ction Strip in Tube Cut Too Short | | | | | Misread Power Loss | | | | /Surge | | Other |
| | Ripples in Bend Drill Holes | | | | | | Offset | | | | | | | |

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Picklist Print

October-05-12 11:24:47 AM

Work Order ID: 91388

Parent Item:

D350-636-012

Parent Item Name: Skidtube RH

91388 *D350-636-012*

Start Date: 05/10/2012

Required Date: 19/10/2012

Start Qty: 1.00

Required Qty: 1.00

D3791-1

D3791-1

| 3793-3 | | |
|--------|----|--|
| D2702 | 2* | |

113793-3

Wearshoe

- MS21043-6

MS21043-6 NUT

Manufactured

Manufactured No

Purchased

No

230

Each

21.0000

Loc Code

**

| Location | | Loc Oty |
|----------|-----|---------|
| FP001 | | 18 |
| 8742 | 2 / | 9 |
| 8924 | 4 | 9 |
| FP002 | | 3 |
| 6223 | 9 | 2 |
| 8339 | 2 | 1 |
| | 230 | Each |
| | | |

16.0000

Loc Code

| Location | <u>Lo</u> | oc Oty | Loc Code |
|----------|-----------|--------|----------|
| FP001 | | 16 | |
| 83901 | | 4 | |
| 87135 | | 12 | |
| | 230 | Each | 460.0000 |

**

Location Loc Oty FG 20 103693 20 ST301 440 117887 120308 436

| | | | | | | | | | | | | DQA: | Da | te: | |
|-----------------------|------|------------|------------|----------|-------------------|--------------------------------|--|-------------|----------------|------------------|---------------------------------|--------------|-------------|-------------|------------------|
| NCR: | /es | / No | | | | WORK ORDER NON- | COI | NFORM | MANCE / UPI | DATE | | | | • | |
| | | | | | | | | | | | QA | A Closed: | Da | te: | |
| Work Orde | or. | | | | | DISPOSITION | | | | AGAINST DE | PA | RTMENT/ | PROCESS | | |
| | • | | | | | Rework Skid-tube Crosstube | | | ├ |] | Water Jet | | | Engineering | |
| Part N | ١٥. | | | | | · | Scrap Machining Small Fab | | | Prod. Eng. Coor. | | | - | Quality | |
| NCR I | No. | | | | | Use-as-is Work Order Update | Jse-as-is Thermoforming Finishing Update Large Fab Composite | | | | Rec/Store/Packaging Supplier | | | Other | |
| Root | | | | | Descri | ption of work order update | T | Initial | Act | ion | : | Sign & | | | |
| Cause | | Date | Step | Qty | (| or Non-conformance | Cr | nief Eng | Descr | ription | | Date | Verificatio | n | QC Inspector |
| Doc/Data | | | | | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | 1 | | | 1 | |
| Operator | | | | | | | | | | | | ļ | | | |
| Material | | | 1 | | | | | | | | | | | | |
| Setup | | | | | | | | | | | | | | | |
| Other | | | | | | | 1 | | | | | | | | |
| Process | | | ļ | | | | | | | | | | | | |
| Supplier | | | | | | | | | | | | | | | |
| Training | | | | | | | | | | | | | | | |
| Unapproved | i | | | | | | <u> </u> | | | | | | | | |
| | | | | | | F | AUI | LT CATE | GORY | | | | | | |
| Landi | ng (| Gear | | | | General | | _ | | | _ | | | _ | • |
| | | Bending | | | | Bend | | Grain | | |]o | valized | | | Pressure/Forced |
| | | Centre No | ot Concer | ntric to | o/s | BOM/Route | | Hardwa | re | | ٦o٠ | ver/Under | tolerance | | Temperature/Cure |
| | | Cracks | | | Broken/Damaged | | | Inspecti | ion Incomplete | | Pa | art Incorrec | ct | L | Weld |
| Crushed/Crimped Burrs | | | | Instruct | ions Incomplete/U | Jnclear | Pa | art Lost/Mi | ssing | | Wrong Stock Pulled | | | | |
| | | Cuffs | | | | Contamination | | Mainte | nance | | Part Moved | | | | |
| | | Heat Trea | t | | | Countersink | | Mislabeled | | | Positioned Wrong | | | _ | |
| | | Inspection | n Strip in | Tube | | Cut Too Short | Misread | | | Pc | ower Loss/S | Surge | | Other | |

Offset

Out of Calibration
Out of Sequence

Outside Dimensions

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drill Holes

Drawing

Finish Folio

, Picklist Print

October-05-12 11:24:47 AM

Work Order ID: 91388

Parent Item:

D3794-1

D350-636-012

Parent Item Name: Skidtube RH

D3794-1

91388 *D350-636-012*

Start Date: 05/10/2012

Required Date: 19/10/2012

Start Qty: 1.00

Required Qty: 1.00

Manufactured

Each

230

23 0000

Loc Code

**

62/10/25

NAS1611-010

Purchased

No

Location Loc Qty FP 10 87631 10 FP002 83395 FP012 12 90163 12 230 Each

140.0000

**

NAS1611-010 O-RING

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| FP001 | 140 | |
| 110915 | 14 | |
| 117460 | 8 | |
| 118077 | , 1 | |
| 118612 | 3 | |
| 119438 | 47 | |
| 121259 | 2 | |
| 121584 | 2 | |
| 121723 | 7 | |
| 122151 | 56 | |
| | • | |

123352

| NCR: Y | NCR: Yes / No WORK ORDER NON-CONFORMANCE / UPDATE | | | | | | | | | | | |
|---------------|---|--------------------|------|--------|--------------------------|----------|-------------------------|------------|--------------|---------------|--------------------|--|
| | | | | | | | | | QA Closed: | Date: | | |
| Work Orde | nr: | | | | DISPOSITION | | | AGAINST DE | PARTMENT, | /PROCESS | | |
| WOIK OIGE | =1. | · | | | Rework | 1 l | Skid-tube | Crosstube | 1 | Water Jet | Engineering | |
| Part No. | | | | | Scrap | <u> </u> | Machining | Small Fab | Pro | d. Eng. Coor. | Quality | |
| , are i | ··· | | | | Use-as-is | The | Thermoforming Finishing | | | re/Packaging | Other | |
| NCR N | lo | | | | Work Order Update | | Large Fab | Composite | Supplier | | | |
| Root | | | | Descri | ton of work order update | Initial | Ac | ction | Sign & | | | |
| Cause | Date | Step | Qty | (| or Non-conformance | Chief En | g Desc | ription | Date | Verification | QC Inspector | |
| Doc/Data | | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | |
| Material | | 1 | | | | | | | | | | |
| Setup | | | | | | | | | | | | |
| Other | | | | | | | - | | | | | |
| Process | | | | | | | | | | | | |
| Supplier | | | | | | | | | | | | |
| Training | | | | | | | | | | | | |
| Unapproved | | | | | | | | | İ | <u> </u> | | |
| | | | | | F | AULT CAT | EGORY | | | | | |
| Landi | ng Gear | | | | General | | • | | _ | | _ | |
| | Bending | Bending Bend Grain | | | Ovalized | | Pressure/Forced | | | | | |
| | Bending Centre Not Concentric to O/S | | | | BOM/Route | Hard | vare | | Over/Under | tolerance | Temperature/Cure | |
| | Centre Not Concentric to O/S Cracks | | | | Broken/Damaged | Inspe | ction Incomplete | | Part Incorre | ct | Weld | |
| | Crushed/ | Crimped. | | | Burrs | Instru | ctions Incomplete, | /Unclear | Part Lost/M | issing | Wrong Stock Pulled | |
| | Cuffs | | | | Contamination | Main | tenance | | Part Moved | | | |
| | Heat Tre | at | | | Countersink | Misla | beled | | Positioned \ | W rong | | |
| ļ | Inspectio | n Strip in | Tube | | Cut Too Short | Misre | ad | | Power Loss, | /Surge | Other | |
| | Ripples in Bend | | | | Drill Holes | Offse | Offset | | | | | |

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Picklist Print

October-05-12 11:24:47 AM

Work Order ID: 91388

Parent Item:

D350-636-012

Parent Item Name: Skidtube RH

91388 *D350-636-012*

Start Date: 05/10/2012

Required Date: 19/10/2012

Start Qty: 1.00

**

61.0000

Required Qty: 1.00



NAS1515H3L

*NAS1515H3I * WASHER

| Location | | L |
|----------|------|---|
| FG | | |
| 8: | 5480 | |
| ST | | |

Purchased No

Manufactured

| Location | <u>L</u> . | Loc Qty | | | | | | |
|----------|------------|---------|----------|--|--|--|--|--|
| FG | | 2 | | | | | | |
| 85480 | | 2 | | | | | | |
| ST | | -10 | | | | | | |
| ST466 | | 69 | | | | | | |
| 71856 | | 1 | | | | | | |
| 85480 | | 19 | | | | | | |
| 88824 | | 39 | | | | | | |
| | 230 | Each | 219.0000 | | | | | |

250

219.0000

Each

**

| Locatio | <u>n</u> | Loc Qty | Loc Code |
|---------|----------|---------|----------|
| FG | | 40 | |
| | 102472 | 40 | |
| ST277 | | 179 | |
| | 118686 | 3 | |
| | 120360 | 11 | |
| | 121556 | 45 | |
| | 122151 | 120 | |

| | | | | | | | | | | | DQA: | Date: | | |
|---------------|------|------------|------------|------------|----------|----------------------------|-----|--------------|-----------------------|-----------------------|--------------|---------------|--------------------|--|
| NCR: | Yes | / No | | | | WORK ORDER NON- | COI | NFORN | MANCE / UPDAT | Έ | · | | • | |
| | | | | | | QA Closed: Date: | | | | | | | | |
| Mork Orde | ٠., | | | | | DISPOSITION | | | Δ. | AGAINST DEF | PARTMENT | PROCESS | | |
| Work Orde | ٠ | | | | | Rework | ٦ | | Skid-tube Cr | rosstube | | Water Jet | Engineering | |
| Part No. | | | | | | Scrap Use-as-is | | N | Machining S | mall Fab Finishing | | d. Eng. Coor. | Quality Other | |
| NCR No. | | | | | | Work Order Update | _ | | ~ — | mposite | · | Supplier | | |
| Root | | | | | Descri | ption of work order update | | Initial | Action | | Sign & | | | |
| Cause | | Date | Step | Qty | (| or Non-conformance | Ch | nief Eng | Descriptio | n | Date | Verification | QC Inspector | |
| Doc/Data | | | | | | | | | | | | | | |
| Equip/Tooling | Ш | | | | | | İ | | | : | | | | |
| Operator | Ш | | | | | | | | | | | | | |
| Material | | | 1 | | | | | | | | : | | | |
| Setup | | | | | | | | | | | | | | |
| Other | Ш | | | | | | | | | | | | | |
| Process | Ш | | | | | | | | | | | | | |
| Supplier | Ш | | | | | | | | | | | | | |
| Training | | | | | | | | | | | | | | |
| Unapproved | | | | | | | | | | | | | | |
| | | | | | | | AUI | LT CATE | GORY | | | | | |
| Landi | ng G | Gear | | | | General | | - | | | 1 | _ | 7 | |
| | Ш | Bending | | | <u> </u> | Bend | | Grain | | | Ovalized | | Pressure/Forced | |
| - | Ш | Centre No | ot Conce | ntric to (| D/S | BOM/Route | | Hardwa | re | | Over/Under | tolerance | Temperature/Cure | |
| | | Cracks | | | | Broken/Damaged | L | Inspecti | on Incomplete | | Part Incorre | ct | Weld | |
| | | Crushed/ | Crimped | | | Burrs | | Instruct | ions Incomplete/Uncle | ear | Part Lost/M | issing | Wrong Stock Pulled | |
| | | Cuffs | | | | Contamination | L | Mainte | nance | | Part Moved | | | |
| | | Heat Trea | nt | | | Countersink | L | Mislabe | led | | Positioned \ | Wrong | - | |
| | | Inspectio | n Strip in | Tube | | Cut Too Short | | Misread | I | | Power Loss/ | 'Surge | Other | |
| | | Ripples ir | Bend | | | Drill Holes | | Offset | | | | | | |

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

October-05-12 11:24:47 AM

Work Order ID: 91388

Parent Item:

NAS1611-013

D350-636-012

Parent Item Name: Skidtube RH

91388 *D350-636-012*

Start Date: 05/10/2012

Required Date: 19/10/2012

Required Qty: 1.00

Start Qty: 1.00

216.0000

NAS1611-013

Purchased No 230

**

| <u>Location</u> | Loc Qty | Loc Code | |
|-----------------|---------|----------|--|
| FP001 | 216 | | |
| 116582 | 5 | | |
| 117291 | 2 | | |
| 117887 | 53 | | |
| 119623 | 36 | | |
| 121825 | 18 | | |
| 121826 | 2 | | |
| 122993 🗸 | 100 | | |
| | | | |

Each

| | | | | | | | | | DQA: | Date: | • | | | | |
|--------------|--------|------|-----|-------------------------------|--|---------|------------|----------------------------|----------|-------------------------------------|---------------------------|--|--|--|--|
| NCR: Yes | s / No | | | WORK ORDER NO | ON-CON | IFORN | QA Closed: | Date: | • | | | | | | |
| Work Order: | | | | DISPOSITION | DISPOSITION | | | AGAINST DEPARTMENT/PROCESS | | | | | | | |
| Part No. | - | | | Scr | Rework Skid-tube Crosstube Scrap Machining Small Fab Use-as-is Thermoforming Finishing | | | | | Water Jet d. Eng. Coor. e/Packaging | Engineering Quality Other | | | | |
| NCR No. | • | | | Work Order Upda | — | | Large Fab | Composite | ned sto. | Supplier | | | | | |
| Root | | | | Description of work order upd | late I | nitial | Ac | tion | Sign & | | | | | | |
| Cause | Date | Step | Qty | or Non-conformance | Chi | ief Eng | Desc | ription | Date | Verification | QC Inspector | | | | |
| Doc/Data | | | | | | | | | ; | | | | | | |
| quip/Tooling | | | | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | | | | |
| Material | | ļ | ' | | | | | | | | | | | | |
| Setup | | 1 | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | | | |
| Process | | | | | | | | | | | | | | | |

| Landing | Gear | General | | _ | _ | | _ |
|---------|------------------------------|----------------|---|---------------------------------|----------------------|---|--------------------|
| | Bending | Bend | Г | Grain | Ovalized | | Pressure/Forced |
| | Centre Not Concentric to O/S | BOM/Route | | Hardware | Over/Under tolerance | | Temperature/Cure |
| | Cracks | Broken/Damaged | | Inspection Incomplete | Part Incorrect | L | Weld |
| | Crushed/Crimped. | Burrs | | Instructions Incomplete/Unclear | Part Lost/Missing | | Wrong Stock Pulled |
| | Cuffs | Contamination | | Maintenance | Part Moved | | |
| | Heat Treat | Countersink | | Mislabeled | Positioned Wrong | | _ |
| | Inspection Strip in Tube | Cut Too Short | | Misread | Power Loss/Surge | | Other |
| | Ripples in Bend | Drill Holes | | Offset | | | |
| | Torque Waves in Extrusion | Drawing | | Out of Calibration | | | |
| | Turning Sequence | Finish | | Out of Sequence | | | |

Outside Dimensions

FAULT CATEGORY

Wave/Twist in Tube

Folio

Supplier Training Unapproved October-05-12 11:24:47 AM

Work Order ID: 91388

, Parent Item:

D350-636-012

Parent Item Name: Skidtube RH

Purchased

Purchased

No

No

91388 *D350-636-012*

Start Date: 05/10/2012

Required Date: 19/10/2012

Start Qty: 1.00

Required Qty: 1.00

**

1.071.000

AN3C6A

AN3C6A

Location

230

Each

Loc Qty Loc Code FG 10 122416 10 FP001 111982 ST351 1060 111982 2 116419 23 116549 2 116704 12 117619 10 117688 117872 5

> 120423 120693 121682 122416 122599

118422

119449

500 Each

13

21

3

38

426

417.0000 **

Loc Code

Location Loc Oty 296 200 122441 200 ST297 217 114915 217

October-05-12 11:24:47 AM

NAS1149C0832R

NAS1149C0832R

WASHER

Shop Packet Print

Page 8

230

| | | | | | | | | | | | | DQA: | Date | e: _ | |
|---------------|------|-----------|----------|----------|-----|----------------------------|-----|-------------|------------------|-----------|----------|--------------|---------------|-------------|--------------------|
| NCR: Y | /es | / No | | | | WORK ORDER NON-C | 100 | NFORM | AANCE / UP | DATE | | · | | | , |
| | | | ••• | | | | | | | | | QA Closed: | Date | 3: | |
| Work Orde | · · | | | | | DISPOSITION | | | | AGAINST | DE | PARTMENT | PROCESS | | |
| Work Order: | | | | | | Rework | 1 | | Skid-tube | Crosstube | | | Water Jet | \neg | Engineering |
| Part N | No. | | | | | Scrap | | i | Machining | Small Fab | \dashv | Pro | d. Eng. Coor. | ╡ | Quality |
| | - | | | | | Use-as-is | 1 | Therm | noforming | Finishing | | Rec/Stor | e/Packaging | | Other |
| NCR N | No. | | | | | Work Order Update |] | | Large Fab | Composite | | | Supplier | | |
| | | | | | | L | | | | | _ | S: 0 | | | |
| Root | | | _ | _ | i | ption of work order update | | nitial | | tion | | Sign & | | | 0.01 |
| Cause | | Date | Step | Qty | (| or Non-conformance | Ch | ief Eng | Desc | ription | | Date | Verification | \dashv | QC Inspector |
| Doc/Data | | | | | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | | | | | |
| Operator | | | | | | | | | | | | | | | |
| Material | | | | | | | | | | | | | | | |
| Setup | | | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | | | |
| Process | | | | | | | | | | | | , | | | |
| Supplier | | | | | | | | | | | | | | | |
| Training | | | | | | | | | | | | | | 1 | |
| Unapproved | | | | | | | | | | | | | | | |
| | | | | | | F | AUI | T CATE | GORY | | | | | | |
| Landi | ng G | ìear | | | | General | | _ | | | | _ | _ | | |
| | | Bending | | | | Bend | | Grain | | | | Ovalized | | | Pressure/Forced |
| | | Centre No | ot Conce | ntric to | o/s | BOM/Route | | Hardwa | re | | | Over/Under | tolerance | | Temperature/Cure |
| | | Cracks | | | | Broken/Damaged | | Inspect | on Incomplete | | | Part Incorre | ct [| | Weld |
| | | Crushed/0 | Crimped. | | | Burrs | | Instruct | ions Incomplete/ | 'Unclear | | Part Lost/M | issing | | Wrong Stock Pulled |
| | | | | | | Contamination | | Maintenance | | | | Part Moved | _ | | |

Mislabeled

Out of Calibration

Out of Sequence

Outside Dimensions

Misread

Offset

Positioned Wrong

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

October-05-12 11:24:47 AM

Work Order ID: 91388

Parent Item:

D350-636-012

Parent Item Name: Skidtube RH

91388 *D350-636-012*

Start Date: 05/10/2012

Required Date: 19/10/2012

Start Qty: 1.00

Required Qty: 1.00

D3536-25

D3536-25

Manufactured

Manufactured

230

Each 8 0000

**

D3794-3

D3794-3

Location Loc Qty 83900 87053 FP002 89057 230 Each

20.0000 **

Loc Code

Loc Code

Location Loc Qty FP002 20 74530 2 86243 18

| NCR: | Yes | / | No |
|------|-----|---|----|
| | | | |

DQA: ____ Date:

| NCR: Y | ICR: Yes / No WORK ORDER NON-CONFORMANCE / UPDATE | | | | | | | | | | | | |
|--------------|---|------------|------------|----------|-------------|--|----------|---------|---|------------|--------------|--------------|---------------------|
| | | | | | | | | | | | QA Closed: | Date: | |
| Nork Orde | ır. | | | | | DISPOSITION | | | | AGAINST DE | PARTMENT | PROCESS | |
| Part N | | | | | | Rework Scrap | | | Skid-tube Crosstube Water Jet Machining Small Fab Prod. Eng. Coor. | | | | Engineering Quality |
| NCR N | Use-as-is The Work Order Update | | | | | Thermoforming Finishing Rec/Store/Packaging Other Large Fab Composite Supplier | | | | Other | | | |
| Root | | | | | Descr | iption of work order update | | nitial | Ad | ction | Sign & | | |
| Cause | ı | Date | Step | Qty | | or Non-conformance | Ch | ief Eng | Desc | cription | Date | Verification | QC Inspector |
| oc/Data | | | | | | | | | | | | | |
| quip/Tooling | | | | | | | | | | | | | |
| perator | | | | | | | | - | | | | | |
| 1aterial | | | | | : | | | | | | | | |
| etup | | | | | | | ł | | | | | ! | |
| ther | | | | | | | | | | | | | |
| rocess | | | | | | | | | | | | | |
| upplier | | | | | | | | | | | | | |
| raining | | | | | | | | | | | | | |
| Inapproved | | | | <u> </u> | | | | | | | | | |
| | | | | | | | FAUL | T CATE | GORY | | | | |
| Landi | | 1 | | | | General | _ | 1 | | _ _ | 7 | _ | ¬ . |
| | | Bending | | | | Bend | \perp | Grain | | | Ovalized | | Pressure/Forced |
| | | Centre No | ot Concer | ntric to | o/s | BOM/Route | <u> </u> | Hardwa | | <u> </u> | Over/Under | - | Temperature/Cure |
| | | Cracks | | | | Broken/Damaged | \perp | 4 | ion Incomplete | | Part Incorre | | Weld |
| | | Crushed/0 | Crimped. | • | | Burrs | _ | - | ions Incomplete | /Unclear | Part Lost/Mi | issing | Wrong Stock Pulled |
| | | Cuffs | | | | Contamination | _ | Mainte | | <u> </u> | Part Moved | | |
| | | Heat Trea | | | | Countersink | \perp | Mislabe | | | Positioned V | | - |
| | | Inspection | | Tube | L | Cut Too Short | \perp | Misread | d | | Power Loss/ | Surge | Other |
| | | Ripples in | | | | Drill Holes | | Offset | | | | | |
| | | Torque W | | | n | Drawing | | 4 | Calibration | | | | |
| | | Turning S | | | L | Finish | L | 4 | Sequence | | | | |
| | | Wave/Tw | ist in Tub | эe | | Folio | 1 | Outside | Dimensions | | | | |

October-05-12 11:24:47 AM

Work Order ID: 91388

Parent Item:

D350-636-012

Purchased

Manufactured

No

No

Parent Item Name: Skidtube RH

91388 *D350-636-012*

230

Start Date: 05/10/2012

Required Date: 19/10/2012

Start Qty: 1.00

Required Qty: 1.00

AN3C5A

AN3C5A

901.0000 **

| Locatio | <u>n</u> | Lo | c Qty | Loc Code | | |
|---------|----------|-----|-------|----------|---|---|
| FG | | | 5 | | | |
| | 122800 | | 5 | | | |
| FP001 | | | 7 | | | |
| | 115835 | | 7 | | | |
| ST350 | | | 889 | | | |
| | 115835 | | 0 | | | |
| | 116419 | | 28 | | | |
| | 117343 | | 13 | | | |
| | 117764 | | 7 | | | |
| | 117872 | | 2 | | | |
| | 119749 | | 23 | | | |
| | 120423 | | 28 | | | |
| | 121255 | | 23 | | | |
| | 121708 | | 406 | | | |
| | 122141 | | 80 | | | |
| | 122800 | | 279 | | | |
| | | 230 | Each | 86.0000 | 3 | 3 |

Each

D3537-1

Wearpad

Location Loc Qty Loc Code 2 2 FP001 36 83851 36 FP002 48 83254 83255 3 87697 37

7

88562

| | | | | | | | | | | | DQA: | Date: | |
|---------------|-----------|------------|------------|----------|--------------|--------------------------------|--|----------|-------------------------|-----------|--------------|--------------|--------------------|
| NCR: Y | ⁄es | / No | | | | WORK ORDER NON- | COI | NFORN | MANCE / UPDATE | | | | |
| | | _ | | | | | | | | | QA Closed: | Date: | |
| Work Orde | ar. | | | | | DISPOSITION | | | AG | AINST DE | PARTMENT, | /PROCESS | |
| WOIR Old | -1. | | | | . | Rework Skid-tube Crosstube | | | | Water Jet | Engineering | | |
| Part N | No | . —— | | | | Scrap | p Machining Small Fab Prod. Eng. Coor. | | | | | Quality | |
| NCR N | No | | | | | Use-as-is Work Order Update | Large Fab Composite Supplier | | | | | J Other | |
| Root | | | | | Descri | ption of work order update | | Initial | Action | | Sign & | | |
| Cause | | Date | Step | Qty | C | or Non-conformance | Ch | nief Eng | Description | | Date | Verification | QC Inspector |
| Doc/Data | | | | | | | | | | | | | |
| Equip/Tooling | Ш | | | | | | | | | | | | |
| Operator | Ш | | | | | | | | | | | | |
| Material | Ш | | 1 | | | | | | | | | | |
| Setup | Ц | | | | | | | | | | | | |
| Other | Ш | | | | | | | | | | | | |
| Process | Ц | | | | | | | | | | | | |
| Supplier | | | | | | | | | | | | | |
| Training | | | | | | | 1 | | | | | | |
| Unapproved | | | | | | | | | | | | | |
| | | | | | | | AUI | LT CATE | GORY | | | | |
| Landi | ng G | ear | | | guerra | General | | - | | <u> </u> | - | | 7 |
| | \square | Bending | | | | Bend | | Grain | | | Ovalized | L | Pressure/Forced |
| | | Centre No | ot Conce | ntric to | o/s | BOM/Route | _ | Hardwa | re | | Over/Under | tolerance | Temperature/Cure |
| | | Cracks | | | | Broken/Damaged | | Inspecti | on Incomplete | | Part Incorre | ct | Weld |
| | \square | Crushed/ | Crimped | - | | Burrs | | Instruct | ions Incomplete/Unclear | | Part Lost/M | issing | Wrong Stock Pulled |
| | | Cuffs | | | | Contamination | |] Mainte | nance | | Part Moved | | |
| | | Heat Trea | it | | | Countersink | | Mislabe | led | | Positioned \ | Wrong | _ |
| | | Inspectio | n Strip in | Tube | | Cut Too Short | | Misread | l | | Power Loss, | /Surge | Other |
| | П | Ripples in | Bend | | | Drill Holes | | Offset | | | _ | | |

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Öctober-05-12 11:24:47 AM

Work Order ID: 91388

D3535-25

D350-636-012

Parent Item: Parent Item Name: Skidtube RH

D3535-25

91388

D350-636-012 Start Date: 05/10/2012 **Required Date: 19/10/2012** Start Qty: 1.00 Required Qty: 1.00 Manufactured 230 Each 29.0000 1 B 12/10/25

| Location | Lo | oc Oty | Loc Code | | | / ./ |
|-----------------|-----|--------|----------|---|---|------|
| FP001 | | 29 | | | | |
| 62233 | | 1 | | | | |
| 81357 | | 1 | | | | |
| 83387 | | 1 | | | | |
| 87385 | | 13 | | | | |
| 90061 | | 13 | | | | |
| | 230 | Each | 183.0000 | 8 | 8 | |

Plug

D3492-3

| <u>Location</u> | Loc Oty | Loc Code |
|-----------------|---------|----------|
| FP001 | 40 | |
| 90322 | 40 | |
| FP002 | 40 | |
| 89291 | 40 | |
| FP-A | 103 | • |

No

Manufactured

46 40 230 Each

21.0000

38 B 12/0/25

(DB) 12/10/25

*AN960C101 *

NAS1149C0332 Purchased

washer

AN960C10L

| Locat | <u>ion</u> |
|-------|------------|
| ST | 123248 |
| | 107534 |

Loc Oty 21 21 Loc Code

| | | | | | | | | | | | DQA: | Date | : a* * |
|---------------|-----------------------|------------|-------------|------------|-------------------|----------------------------|----------|----------|------------------|------------|--------------|----------------------------|--------------------|
| NCR: | Yes | / No | | | | WORK ORDER NON- | COI | NFORI\ | /IANCE / UP | DATE | | | |
| | | | | | | | | | | | QA Closed: | Date | |
| Mark Ord | ~~. | | | | | DISPOSITION | | | | AGAINST DE | PARTMENT, | /PROCESS | |
| Work Orde | er. - | | | | | Rework Skid-tube Crosstul | | | Crosstube |] | Engineering | | |
| Part f | Vo. | | | | | Scrap | 1 | 1 | Machining | Small Fab | Pro | Water Jet d. Eng. Coor. | Quality |
| | - | | · · · · · · | | | Use-as-is | 1 | | noforming | Finishing | 4 | re/Packaging | Other |
| NCR I | No. | | | | | Work Order Update |] | | Large Fab | Composite | | Supplier | |
| | | | | | | | | <u> </u> | | | T | | |
| Root | 1 | | | | | ption of work order update | 1 | Initial | | tion | Sign & | | |
| Cause | , | Date | Step | Qty | (| or Non-conformance | Cr | nief Eng | Desc | ription | Date | Verification | QC Inspector |
| Doc/Data | Н | | | | | | | | | | | | |
| Equip/Tooling | Н | | | | | | | | | | | | |
| Operator | Щ | | | | | | | | | | | | |
| Material | Ш | | İ | | | | | | İ | | | | |
| Setup | Щ | | | | | | | Ì | I | | | | 1 |
| Other | Н | | | 1 1 | | | | | | | | | |
| Process | Щ | | | | | | | | | | | | |
| Supplier | Н | | 1 | | | | | | | | | | |
| Training | Ш | | | | | | | | | | | | |
| Unapproved | | | <u> </u> | | | | | | | | | L | |
| | | | | | | | AUI | LT CATE | JORY | | | | |
| Landi | $\overline{}$ | | | | | General | _ | la : | | <u> </u> | ۱ | r | 7 |
| | $\boldsymbol{\vdash}$ | Bending | _ | | | Bend | - | Grain | | <u> </u> | Ovalized | | Pressure/Forced |
| | \vdash | Centre N | ot Conce | ntric to (| ^{D/S} - | BOM/Route | \vdash | Hardwa | | | Over/Under | <u> </u> | Temperature/Cure |
| | \vdash | Cracks | | | <u> </u> | Broken/Damaged | - | -1 | on Incomplete | | Part Incorre | <u>}</u> | Weld |
| | - | Crushed/ | Crimped | | <u> </u> | Burrs | \vdash | -1 | ions Incomplete/ | Unclear | Part Lost/M | | Wrong Stock Pulled |
| | \vdash | Cuffs | _ | | <u> </u> | Contamination | \vdash | Mainte | | <u> </u> | Part Moved | | |
| | \vdash | Heat Trea | | | - | Countersink | \vdash | Mislabe | | <u> </u> | Positioned | | \neg |
| | \vdash | Inspectio | • | Tube | <u> </u> | Cut Too Short | \vdash | Misread | i | L | Power Loss, | /Surge | Other |
| 1 | 1 | Ripples in | n Bend | | i | Drill Holes | - 1 | Offset | | | | | |

Out of Sequence

Outside Dimensions

Turning Sequence
Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

October-05-12 11:24:47 AM

Work Order ID: 91388

Parent Item:

D3488-042

D350-636-012

Parent Item Name: Skidtube RH

91388 *D350-636-012*

Start Date: 05/10/2012

Required Date: 19/10/2012

Start Qty: 1.00

Required Qty: 1.00

D3488-042

AI S4-1032-225

Blade Fitting Assembly, RH

Manufactured

230

Each

15.0000

**

Location Loc Qty Loc Code -9 83417 3 FP002 24 85734 3 86054 230 Each

ALS4-1032-225

Insert

Purchased

No

FP

120451

2,587.000 **

12/10/25

| <u>Locatio</u> | <u>n</u> | Loc Qty | Loc Code | |
|----------------|----------|---------|----------|---|
| FP-B | | 1156 | | |
| | 122290 | 1156 | | |
| ST281 | | 1408 | | |
| | 108696 | 146 | | |
| | 110768 | . 62 | | - |
| | 118386 | 55 | | _ |
| | 118966 | 68 | | |
| | 121269 | 77 | | |
| | 122827 | 1000 | | |
| ST282 | | 23 | | |
| | 120410 | 10 | | |

13

October-05-12 11:24:47 AM

| | | | | | | | | | | | DQA: | Date: | |
|------------------------|------------------|------------|------------|----------|-------------|----------------------------|--|---------------------|---------------|--------------|--------------------|---------------|------------------|
| NCR: | · | | | | | | | | | | | | |
| | | | | | | | | | | | QA Closed: | Date: | |
| Work Orde | or. | | | | | DISPOSITION | | | | AGAINST DEI | PARTMENT | PROCESS | |
| WOIR Old | - | | | | · · · · · · | Rework | 1 | Skid-tube Crosstube | | | Water Jet | | Engineering |
| Part I | Part No. | | | | | Scrap | ├-┤ | | | | Pro | d. Eng. Coor. | Quality |
| | - | - | | | | Use-as-is | | Therm | oforming | Finishing | Rec/Stor | e/Packaging | Other |
| NCR I | ۷o. ₋ | | | | | Work Order Update | Large Fab Composite Supplier | | | | | | |
| Root | | | | | Descri | ption of work order update | | Initial | Action | | Sign & | | |
| Cause | | Date | Step | Qty | C | or Non-conformance | Ch | nief Eng | Description | on | Date | Verification | QC Inspector |
| Doc/Data | | | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | | - | |
| Operator | | | | | | | 1 | | | | | | |
| Material | | | | | | | | | | | | | |
| Setup | | | | • | | | | | | | | | |
| Other | | | | | | | | | | | | | |
| Process | | | | | | | | • | | | : ! | | |
| Supplier | | | 1 | | | | | | | | | | |
| Training | | | | | | | | | | | | | |
| Unapproved | | | | | | | | | | | | | |
| | | | | | | F | ΑUI | T CATE | GORY | | | | |
| Landi | ng G | Gear | | | | General | | _ | | | | | _ |
| | | Bending | | | | Bend | | Grain | | | Ovalized | | Pressure/Forced |
| | | Centre No | ot Conce | ntric to | o/s | BOM/Route | | Hardwa | re | | Over/Under | tolerance | Temperature/Cure |
| | | Cracks | | | | Broken/Damaged | | Inspecti | on Incomplete | | Part Incorre | ct | Weld |
| Crushed/Crimped. Burrs | | | | Burrs | | Instruct | ions Incomplete/Uncl | ear | Part Lost/M | issing | Wrong Stock Pulled | | |
| Cuffs Contamina | | | | | | Contamination | | Mainte | nance | | Part Moved | _ | |
| | Heat Treat Co | | | | Countersink | | Mislabe | led | | Positioned V | V rong | | |
| | | Inspectio | n Strip in | Tube | | Cut Too Short | | Misread | 1 | | Power Loss/ | 'Surge | Other |
| | П | Ripples in | Bend | | | Drill Holes | | Offset | | | - | | |

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

October-05-12 11:24:47 AM

Work Order ID: 91388

Parent Item:

D350-636-012

Parent Item Name: Skidtube RH

91388 *D350-636-012*

Start Date: 05/10/2012

Required Date: 19/10/2012

Start Qty: 1.00

**

Required Qty: 1.00

D3492-1

D3492-1

Manufactured

230

Each

89.0000

@ 12/10/25_

| Location | <u>n</u> | Loc Qty | Loc Code | | | ' |
|----------|----------|----------|----------|---|-------------|---|
| FP002 | 91466 | 82 | | | | |
| | 69531 | 8 | | | | |
| | 74444 | 2 | | | <u> </u> | |
| | 76235 | 4 | | | | |
| | 88541 | 3 | | | | |
| | 89363 | 40 | | | | |
| | 90334 | 25 | | | | |
| FP-A | | 7 | | | | |
| | 83098 | 7 | | | | |
| | | 230 Each | 26.0000 | 1 | 1 | |

D3793-1

D3793-1

Manufactured

** _ 1 @ 12/10/25

| Location | Loc Qty | Loc Code | | |
|-----------------|---------|----------|---|---|
| FP001 | 26 | | | _ |
| 82171 | 2 | | • | |
| 83903 87273 | 1 | | | |
| 87273 | 10 | | | |
| 89999 | 13 | | | |

| | | | | | | | | | | | DQA: | Date: | |
|---------------|-----------|-----------|----------|----------|--------|---|-------|----------|--|---|--------------|---|---------------------------|
| NCR: | Yes | / No | | | | WORK ORDER NON- | CON | IFORN | MANCE / UPI | DATE | QA Closed: | Date: | |
| Work Ord | or: | | | | | DISPOSITION | | · ···- | | AGAINST DE | PARTMENT | PROCESS | |
| Part I | ۰ . No | | | | | Rework Scrap Use-as-is Work Order Update | | 1 | Skid-tube Machining noforming Large Fab | Crosstube Small Fab Finishing Composite | | Water Jet d. Eng. Coor. re/Packaging Supplier | Engineering Quality Other |
| Root | | | | | Descri | ption of work order update | li li | nitial | Act | ion | Sign & | | |
| Cause | | Date | Step | Qty | [| or Non-conformance | Chi | ief Eng | Descr | iption | Date | Verification | QC Inspector |
| Doc/Data | | | | | | | | | | | | | |
| Equip/Tooling | | |] | | | | | | | | | | |
| Operator | П | | 1 | | 1 | | | | | | | | |
| Material | | | | | | | | | | | | | |
| Setup | | | | | | | 1 | | 1 | | | | |
| Other | П | | | | | | | | | | | | |
| Process | | | | | | | | | | | | | |
| Supplier | | | | | | | 1 | | | | | | |
| Training | | | | | | | | | | | | | |
| Unapproved | | | | | | | | | | | | | |
| | | | | | | F | AUL | T CATE | GORY | | | | |
| Landi | ng G | iear | | | | General | | | | | _ | | _ |
| | | Bending | | | | Bend | | Grain | | | Ovalized | | Pressure/Forced |
| | | Centre No | ot Conce | ntric to | o/s | BOM/Route | | Hardwa | ire | | Over/Under | tolerance | Temperature/Cure |
| | | Cracks | | | | Broken/Damaged | | Inspect | ion Incomplete | | Part Incorre | ct | Weld |
| | | Crushed/ | Crimped. | | | Burrs | | Instruct | tions Incomplete/L | Jnclear | Part Lost/M | issing | Wrong Stock Pulled |
| | | Cuffs | | | | Contamination | | Mainte | enance | | Part Moved | - | |
| 1 | | Heat Trea | ıt | | | Countersink | | Mislahe | hale | | Positioned \ | Vrong | |

Misread

Out of Calibration
Out of Sequence

Outside Dimensions

Offset

Power Loss/Surge

Other

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish Folio

October-05-12 11:24:47 AM

Work Order ID: 91388

Parent Item:

D350-636-012 Parent Item Name: Skidtube RH *91388* *D350-636-012*

Start Date: 05/10/2012

Required Date: 19/10/2012

12/10/25

Start Qty: 1.00

**

28.0000

Required Qty: 1.00

AN8C35A

MS21083C8

BOLT

AN8C35A

Location Loc Qty Loc Code FG 5 121275 5 FP002 22

230

115960 1 121275 21 ST346 114442 0 115188 115960

Each

MS21083C8

NUT

Purchased

Purchased

No

No

230 Each 50.0000

19

**

12/10/25

Location Loc Oty Loc Code 318 26 122452 26 FP002 115884 ST303 4 115884 0 118077 119309 119638 ST321 19

October-05-12 11:24:47 AM

122141

| | | | | | | | | DQA: | Date: | |
|--------------|------|----------|-----|--|-----------|---|---|------------|---|---------------------------|
| NCR: Yes | / No | | | WORK ORDER NON- | CONFOR | MANCE / UF | | QA Closed: | Date: | , |
| Work Order: | | | | DISPOSITION | | | AGAINST DE | PARTMENT | /PROCESS | |
| Part No. | | | | Rework Scrap Use-as-is Work Order Update | ⊣ | Skid-tube Machining noforming Large Fab | Crosstube Small Fab Finishing Composite | | Water Jet d. Eng. Coor. re/Packaging Supplier | Engineering Quality Other |
| Root | | | | Description of work order update | Initial | А | ction | Sign & | | |
| Cause | Date | Step | Qty | or Non-conformance | Chief Eng | Des | cription | Date | Verification | QC Inspector |
| oc/Data | | | | | | | | | | |
| quip/Tooling | | | | | | | | | | |
| perator | | | | | | | | | | |
| //aterial | | | | | | | | | | |
| etup | | | | | | | | | | |
| Other |] | | | | | | | | | |
| rocess | 1 | | | | | | | | | |
| upplier | 1 | 1 | | | ļ | | | | | |
| raining | 1 | | | | | | | | | |
| Inapproved | 1 | | | | | | | | | |
| | | <u> </u> | | F | AULT CATE | GORY | | | | |

Landing Gear General Grain Pressure/Forced Bend Ovalized Bending BOM/Route Temperature/Cure Centre Not Concentric to O/S Hardware Over/Under tolerance Weld Broken/Damaged Part Incorrect Cracks Inspection Incomplete Wrong Stock Pulled Crushed/Crimped. Burrs Instructions Incomplete/Unclear Part Lost/Missing Cuffs Maintenance Part Moved Contamination Mislabeled Positioned Wrong Heat Treat Countersink Inspection Strip in Tube Misread Power Loss/Surge Other Cut Too Short Ripples in Bend Drill Holes Offset Out of Calibration Torque Waves in Extrusion Drawing Turning Sequence Finish Out of Sequence Wave/Twist in Tube Folio Outside Dimensions

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

October-05-12 11:24:47 AM

Work Order ID: 91388

Parent Item:

D350-636-012

Parent Item Name: Skidtube RH

91388 *D350-636-012*

Start Date: 05/10/2012

Required Date: 19/10/2012

Start Qty: 1.00

Required Qty: 1.00

D2745

D2745

Bushing

Manufactured

230

Each

126.0000

| Locatio | <u>n</u> | <u>I</u> | oc Oty | Loc Code | |
|---------|----------|----------|--------|----------|---|
| FP | | | 122 | | |
| | 79518 | | 6 | | |
| | 85416 | | 12 | | |
| | 86870 | | 24 | | |
| | 87527 | | 40 | | |
| | 89303 | | 40 | | |
| FP001 | | | 4 | | |
| | 69529 | | 1 | | |
| | 76142 | | . 1 | | |
| | 83260 | | 2 | | |
| | | 230 | Each | 110 0000 | 4 |

AN6C44A

AN6C44A

BOLT

Purchased

No

Each

110.0000

**

| Location | Loc Oty | Loc Code | |
|----------|---------|----------|--|
| FG ´ | 2 | | |
| 103964 | 2 | | |
| ST340 | 39 | | |
| 122491 | 39 | | |
| ST341 | 47 | | |
| 122843 | 47 | | |
| ST343 | 22 | | |
| 121013 | 11 | | |
| 121167 | 2 | | |
| 122204 | 9 | | |

| | | | | | | | | | | | DQA | ۸: | Date: | |
|---|-------|--|---------|----------|--------|---|----------|----------|---|-------------------------------|---|----------------------------------|----------|---|
| NCR: | Yes | / No | | | | WORK ORDER NON-C | 100 | NFORM | MANCE / UPE | DATE | QA Close | 4. | Date: | |
| | | | | | | DISPOSITION | | | | AGAINST DE | | | | |
| Work Orde | er: _ | | | | | ļ | 1 | | <u></u> | | 1 | | | — |
| Part N | No. | | | | | Rework Scrap Use-as-is | | ĺ | Skid-tube Machining noforming | Crosstube Small Fab Finishing | 4 | Water od. Eng. C ore/Packa | oor. | Engineering Quality Other |
| NCR N | No. | | | | | Work Order Update |] | | Large Fab | Composite |] | Sup | plier . | |
| Root | | | | | Descri | ption of work order update | 1 | Initial | Acti | ion | Sign & | | | |
| Cause | | Date | Step | Qty | (| or Non-conformance | Ch | nief Eng | Descr | iption | Date | Verific | ation | QC Inspector |
| Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved | | | | | | | | | | | | | | |
| опарриотеа | | | L | 1 | L | F | AUL | LT CATE | GORY | | 1 | I | | L |
| Landi | ng G | iear | | | | General | | | | | | | | |
| | | Bending Centre No Cracks Crushed/ Cuffs Heat Trea | Crimped | ntric to | o/s | Bend BOM/Route Broken/Damaged Burrs Contamination Countersink | | 4 | on Incomplete ions Incomplete/U nance | Unclear | Ovalized Over/Und Part Incor Part Lost/ Part Move | Missing _ ed | 2 | Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled |
| | Н | Inspection | | Tubo | - | Cut Too Short | \vdash | Misread | | | Power Los | _ | | Other |
| | | Ripples in | • | lube | | Drill Holes | \vdash | Offset | ı | L | Trower ro: | oo) our ge | <u> </u> | Tottlei |

Out of Calibration
Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

October-05-12 11:24:47 AM

Work Order ID: 91388

Parent Item:

D350-636-012

Parent Item Name: Skidtube RH

91388 *D350-636-012*

Start Date: 05/10/2012

Required Date: 19/10/2012

Start Qty: 1.00

**

Required Qty: 1.00

D3532-1 Spacer

MS21083C8

NAS1149D0863J

NUT

Purchased No

Manufactured

No

85484

Location

ST056

250

20 250 Each

20

Loc Qty

Each

Loc Code

50.0000

20.0000

123346 18

| Locatio | <u>n</u> | Loc Qty | Loc Code |
|---------|----------|---------|--------------|
| 318 | | 26 | |
| | 122452 | 26 | |
| FP002 | | 1 | |
| | 115884 | 1 | |
| ST303 | | 4 | |
| | 115884 | 0 | |
| | 118077 | 1 | |
| | 119309 | 2 | |
| | 119638 | 1 | • |
| ST321 | | 19 | |
| | 122141 | 19 | |
| | | 250 Ea | ach 157.0000 |

**

Purchased WASHER

| Location | Loc Qty | Loc Code |
|-----------------|---------|----------|
| ST298 | 157 | |
| 118078 | 28 | |
| 119307 | 1 | |
| 120308 | 28 | |
| 121556 | 100 | |

| | | | | _ |
|---|---|----|----|---|
| | 2 | 03 | 30 | δ |
| _ | | | | |

| | | | | | | | | | | DQA: | : Dat | e: | |
|---|----------------|-----------------|-----------|--------|------------------------------|-----|-----------------|-----------------------------------|-------------------------------|-----------------------|--|----------|-------------------------------------|
| NCR: | res / N | o | | | WORK ORDER NON-C | O | NFORM | AANCE / UP | DATE | | | | • |
| | | | | | | | | | | QA Closed | : Dat | e: | |
| Work Orde | or. | | | | DISPOSITION | | | | AGAINST DE | PARTMENT | /PROCESS | | |
| Part N | | | | | Rework Scrap Use-as-is | | ŗ | Skid-tube Machining noforming | Crosstube Small Fab Finishing | 4 | Water Jet od. Eng. Coor. ore/Packaging | | Engineering Quality Other |
| NCR N | No | • | | | Work Order Update | | | Large Fab | Composite |] | Supplier | | |
| Root | | | | Descri | ption of work order update | 1 | Initial | Act | tion | Sign & | | | |
| Cause | Dat | e Step | Qty | (| or Non-conformance | Ch | nief Eng | Desc | ription | Date | Verification | | QC Inspector |
| Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved | | | | | | | | | | | | | |
| | | | | | F | AUL | T CATE | GORY | | | | | |
| Landi | ng Gear | | | | General | | l | | | 7 | | | |
| | ⊢ | Not Conce | entric to | o/s | Bend BOM/Route | | Grain Hardwa | re | - | Ovalized Over/Unde | r tolerance | <u> </u> | Pressure/Forced Temperature/Cure |
| | Crack Crush | s ed/Crimped | ł | | Broken/Damaged Burrs | | 1 ' | on Incomplete ions Incomplete/ | Unclear | Part Incorre | 1 | | Weld Wrong Stock Pulled |
| | Cuffs | | | | Contamination | | Mainte | | | Part Moved | | _ | |
| | Heat | | a Tuda a | - | Countersink | - | Mislabe | | | Positioned | | <u></u> | 74b |
| | | ction Strip in | TTUDE | - | Cut Too Short | - | Misread | 1 | L. | Power Loss | /ourge | | Other |

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Page 17

Picklist Print

October-05-12 11:24:47 AM

Work Order ID: 91388

Parent Item:

D350-636-012

Parent Item Name: Skidtube RH

91388 *D350-636-012*

Start Date: 05/10/2012

Required Date: 19/10/2012

Start Qty: 1.00

**

Required Qty: 1.00

AN8C21A

D3493-1

Purchased

250

Each

31.0000

Loc Code

ONLY INSTALL IF INSTALLING ON APICAL FLOAT SYSTEM

Manufactured

No

Location Loc Qty ST050 31 77573 1 82023 2 83097 28

> 250 Each 39.0000

83097

| Location | Loc Qty | <u>Lo</u> |
|----------|---------|-----------|
| ST341 | 25 | |
| 122519 | 25 | |
| ST343 | 14 | |
| 118758 | 1 | |
| 122204 | 13 | |
| | | |

oc Code

| | | | | | | | | | | | DQA: | Date | • | |
|---|-----------|---|----------------------------|-----|--------|---|-----|--|---|---|--|---|---|-----|
| NCR: | ⁄es | / No | | | | WORK ORDER NON-C | O | NFORM | ANCE / UPD | ATE | | | - ; | |
| | | | | | | | | | | | QA Closed: | Date | : | |
| Work Orde | or: | | | | | DISPOSITION | | | | AGAINST DE | PARTMENT | /PROCESS | | |
| Part N | - . No | | | | | Rework Scrap Use-as-is Work Order Update | | Therm | Skid-tube Machining noforming Large Fab | Crosstube Small Fab Finishing Composite | ì | Water Jet d. Eng. Coor. re/Packaging Supplier | Engineering Quality Other | _ |
| Root | | | | | Descri | ption of work order update | Ī | nitial | Actio | on | Sign & | | | |
| Cause | | Date | Step | Qty | C | or Non-conformance | Ch | ief Eng | Descri | otion | Date | Verification | QC Inspect | .or |
| Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved | | | | | | | | | | | | | | |
| | | | | | | | AUL | T CATE | GORY | | | | | |
| Landi | | Bending Centre No Cracks Crushed/O Cuffs Heat Trea Inspection | Crimped t n Strip in | | o/s | General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short | | Instruct Mainte Mislabe Misreac | on Incomplete ions Incomplete/Ui nance led | nclear | Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned N | ct issing Vrong | Pressure/Forced Temperature/C Weld Wrong Stock Pu | ure |
| | | Ripples in | Bend | | 1 | Drill Holes | | Offset | | | | | | |

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

| • . | QTY -041 | QTY -042 | -043 | QTY -044 | PART NUMBER | DESCRIPTION |
|-----------------|-------------|-------------|------|-------------|---------------|--|
| | X | | | | D2750-041 | 350 SKIDTUBE ASSEMBLY LH |
| | | X | | | D2750-042 | 350 SKIDTUBE ASSEMBLY RH |
| | | | Х | | D2750-043 | 350 SKIDTUBE ASSEMBLY LH |
| | | | | X | D2750-044 | 350 SKIDTUBE ASSEMBLY RH |
| | | | | | | |
| | 1 | 1 | 1 | 1 | D2739 | WEB |
| | 8 | 8 | 8 | 8 | D2743 | SPACER |
| | 1 | 1 | 1 1 | 1 | D2744 | CAP |
| | 8 | 8 | 8 | 8 | D2745 | BUSHING |
| | 1 | | 3 | | D2750-1 | SKIDTUBE WELDMENT, LH |
| | | 1 | 1 | | D2750-2 | SKIDTUBE WELDMENT, RH |
| | | | 1 | | D2750-3 | SKIDTUBE WELDMENT, LH |
| | | | | 1 | D2750-4 | SKIDTUBE WELDMENT, RH |
| | 1 | | 1 | | D3488-041 | BLADE FITTING, LH |
| | | 1 | | 1 | D3488-042 | BLADE FITTING, RH |
| | 4 | 4 | 4 | 4 | D3490-1 | SPACER |
| | 4 | 4 | | - | D3490-3 | SPACER |
| | | | 4 | 4 | D3490-5 | SPACER |
| | 8 | 8 | 8 | 8 | D3492-041 | PLUG ASSEMBLY |
| | 8 | 8 | | | D3492-043 | PLUG ASSEMBLY |
| | | | 8 | 8 | D3492-045 | PLUG ASSEMBLY |
| | 1 | 1 | 1 | 1 | D3535-25 | WEARSHOE |
| | 1 | 1 | 1 | 1 | D3536-25 | GASKET |
| Æ | 3 | 3 | 3 | 3 | D3537-1 | WEARPAD |
| | 8 | 8 | 8 | 8 | D3631-1 | WASHER |
| Γ | 1 | 1 | 1 | 1 | D3791-1 | WEARPLATE |
| - | 1 | 1 | 1 | 1 | D3793-1 | WEARSHOE |
| ^ ! | 1 | 1 | 1 | 1 | D3793-3 | WEARSHOE |
| Æ i | 1 | 1 | 1 | 1 | D3794-1 | GASKET |
| | 1 | 1 | 1 | 1 | D3794-3 | GASKET |
| _ | | - | | | 1 | |
| A | 38 | 38 | 38 | 38 | ALS4-1032-225 | INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225) |
| | 34 | 34 | 34 | 34 | AN3C5A | BOLT |
| _ | 4 | 4 | 4 | 4 | AN3C6A | BOLT |
| | 4 | 4 | 4 | 4 | AN6C44A | BOLT |
| | 1 | 1 | 1 | 1 | AN8C35A | BOLT |
| A [| 38 | 38 | 38 | 38 | AN960C10L | WASHER |
| <u>/F\</u> | 1 | 1 | 1 | 1 | AN960C816L | WASHER |
| _ | 4 | 4 | 4 | 4 | MS21043-6 | NUT |
| | 1 | 1 | 1 | | MS21083C8 | NUT |
| | 4 | 4 | 4 | 4 | NAS1515H3L | WASHER |

GENERAL NOTES:

D

MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).

MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).

FINISH:

ACID ETCH, ALONDE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5,1) PER DART QSI 005 4.3

BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).

TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

UNITS: INCHES UNLESS OTHERWISE NOTED

BREAK SHARP EDGES: N/A

IDENTIFICATION: N/A

WEIGHT: D2750-041-042/-043/-044 = 28.5 LBS

WELD PER DART QSI 004

INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL 'F' SIZE HOLES (Ø0.297) FOR WEARSHOE INSERTS

FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:

MINIMUM YIELD TENSILE STRENGTH = 38 KSI

MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI

SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS.

COAT ALL EXPOSED FASTERNERS WITH LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS.

COAT ALL EXPOSED FASTERNERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

PAGE 10.00

ACCOUNTY OF THE PROPERTY OF

SHOP COPY RETURN TO **ENGINEERING** UNCONTROLLED COPY SUBJECT TO AMENDMENT WITHOUT NOTICE WORK ORDER NO. 91388 MC

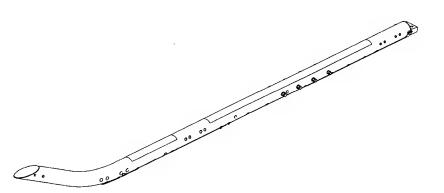
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|------------|---|--|---|------|--------------|--|
| F | OTY (3) D3791- D3794- ADD D3 WEARS (8 PL), \ | PORATE DSI 94 D3537-1 WAS I/-3 REPLACES I/-3 REPLACES I/91-1 (ZN C8-1 HOE HOLES U MEARSHOE HA J41/-042 HARD DTE 12 AND 13 N: REF. NCR 0 | QTY (5) (ZN C8-1); D3535-13/-35 (ZN C8-1); D3535-13/-35 (ZN BB-1);); NDER FWD/AFT SADDLE REMOVED ARDWARE QTY UPDATED (ZN B8-1); WARE LIPDATED (ZN C3-8) 0-141; | РН | 08.07.16 | |
| E | CHANG ADD RL REMOV NAS151 REMOV | E TO STAINLE: JBBER GASKE' E QTY (38) NA: 5H8L; REMOVI E QTY (2) MS2 | SS STEEL WEARPLATES; TS, CHANGE INSERTS, ADD D3631-1; S1515H3L; REMOVE QTY (10) E D2741, QTY (2) AN960C816; 1083C8 | СВ | 07.05.17 | |
| D | ADD HO | DLES AND SHAP | CERS FOR APICAL FLOATS; 133/9157 | PH | 06.01.05 | |
| С | ADD D2 | 750-3/D2750-4: | INCORPORATE D2738 AND D2740 | CP | 98.11.18 | |
| В | CHANG | E MS24694-S2 | 93 TO AN8-16A | CP | 98.09.01 | |
| Α | NEW IS | SUE | | DS | 98.04.16 | |
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| DE APPR. | | 7 | 350 SKIDTUBE ASSEMBLY | | | |
| DATE | 08.0 | 7.16 | COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THE OCCUPENT B FRANTE AND COMPOSITIVE AND IS SUPPLIED ON THE EXPRESA CONCIDENT THAT IT IS NOT TO BE LIBED FOR ANY PARTOCLE OF COMED OF COMPUNICATED TO ANY POTAL PREPOR WITHOUT WAITETER PREMISSION FROM ANY ARPOSPACE USA INC. | | | |

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D2750-041 350 SKIDTUBE ASSEMBLY, LH

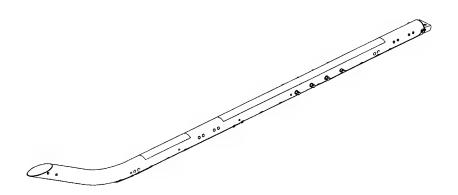
D2750-042 350 SKIDTUBE ASSEMBLY, RH



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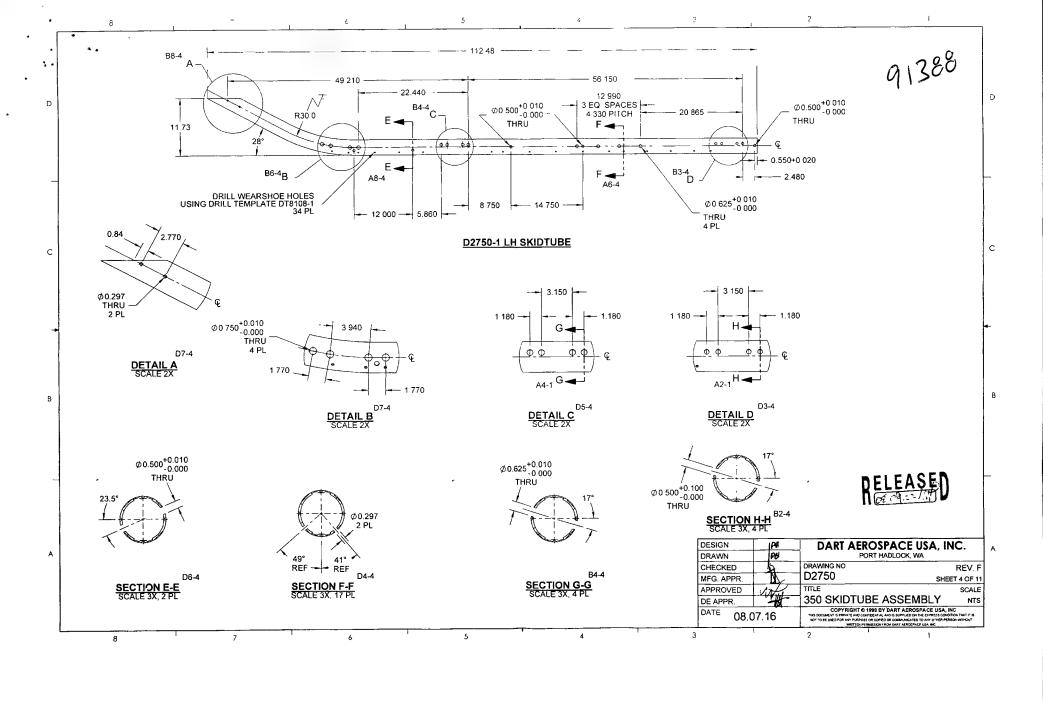
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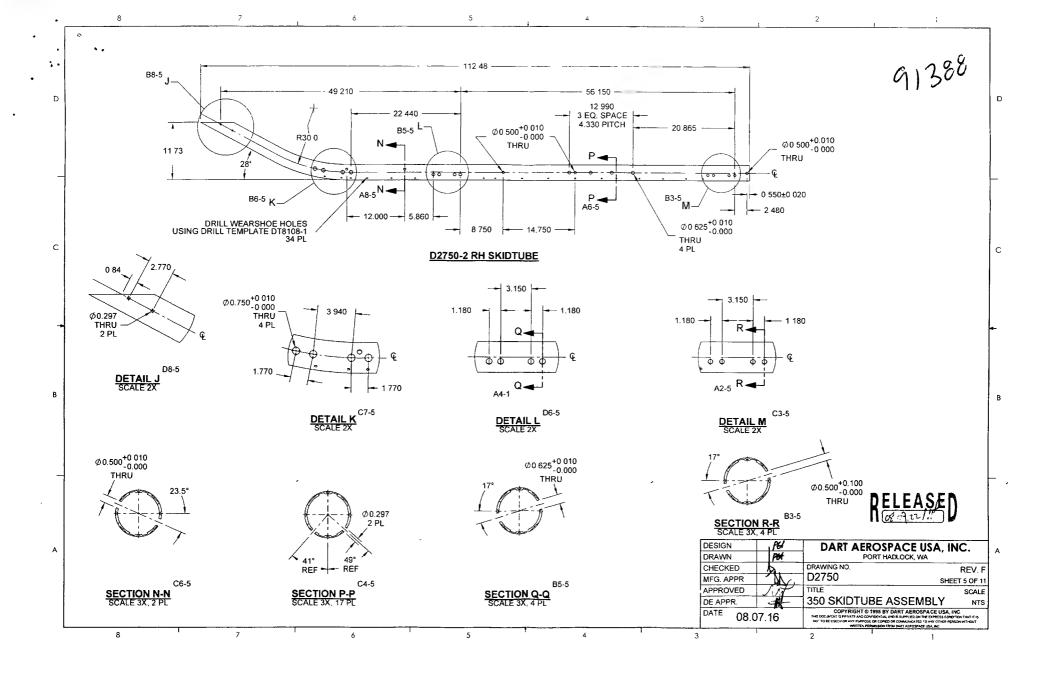
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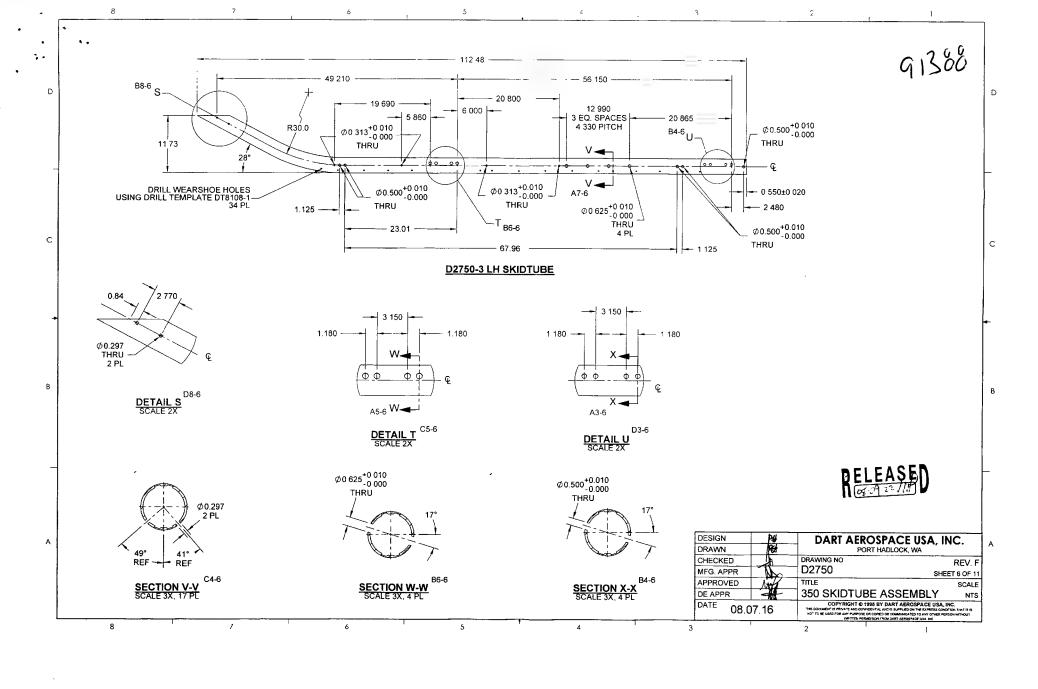


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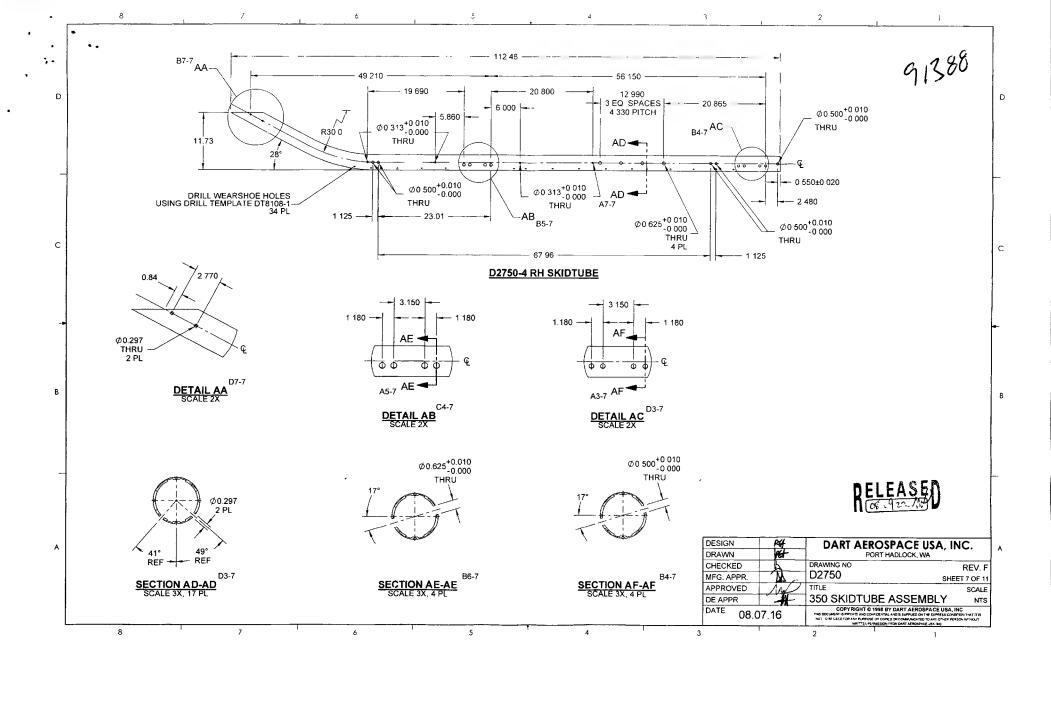
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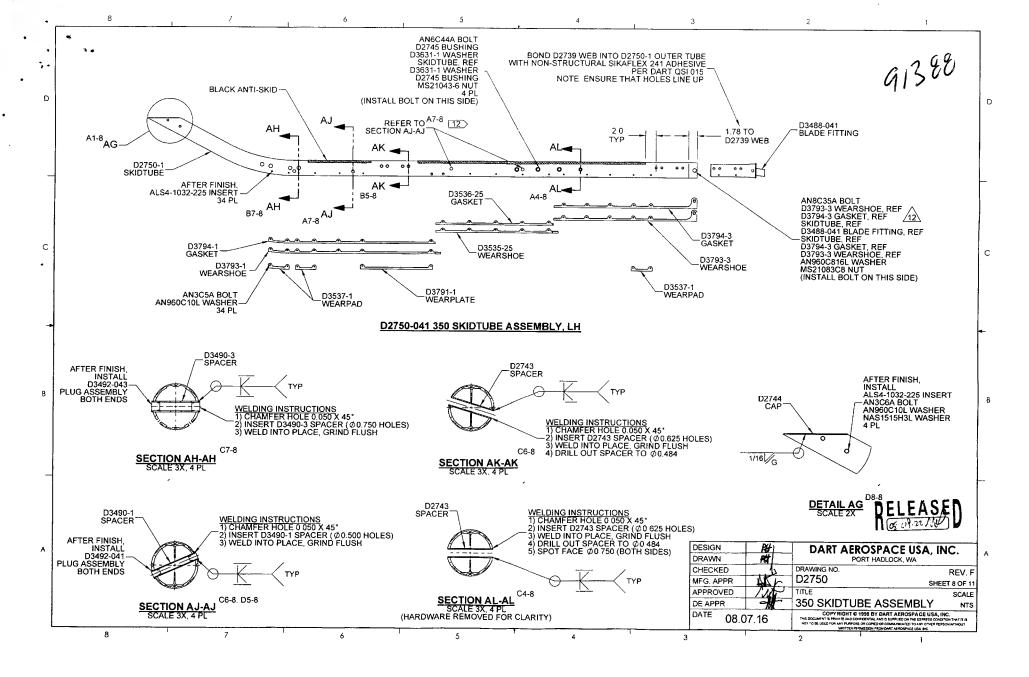


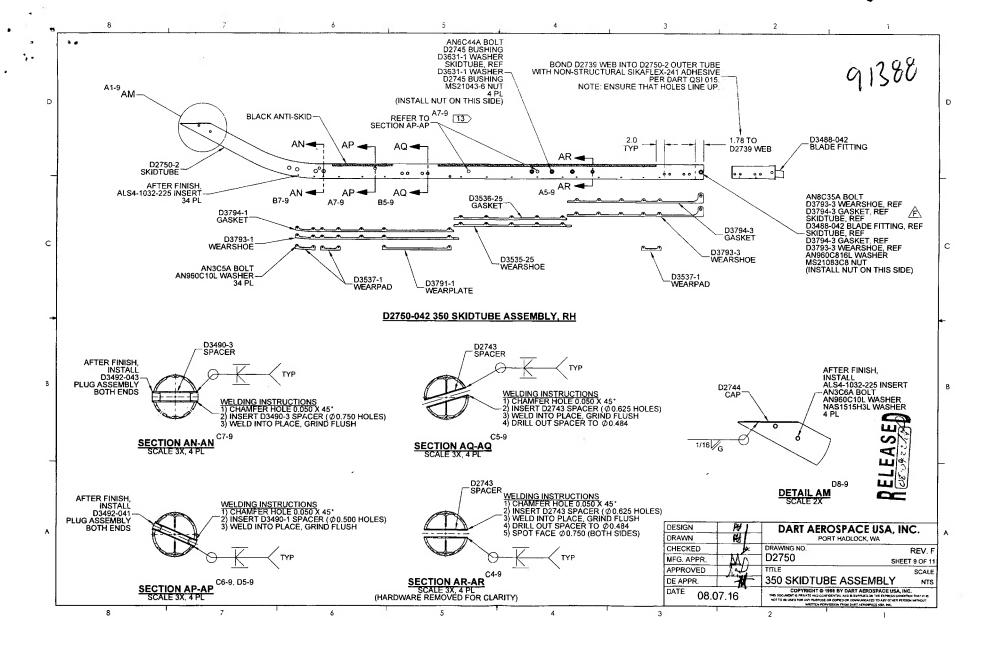


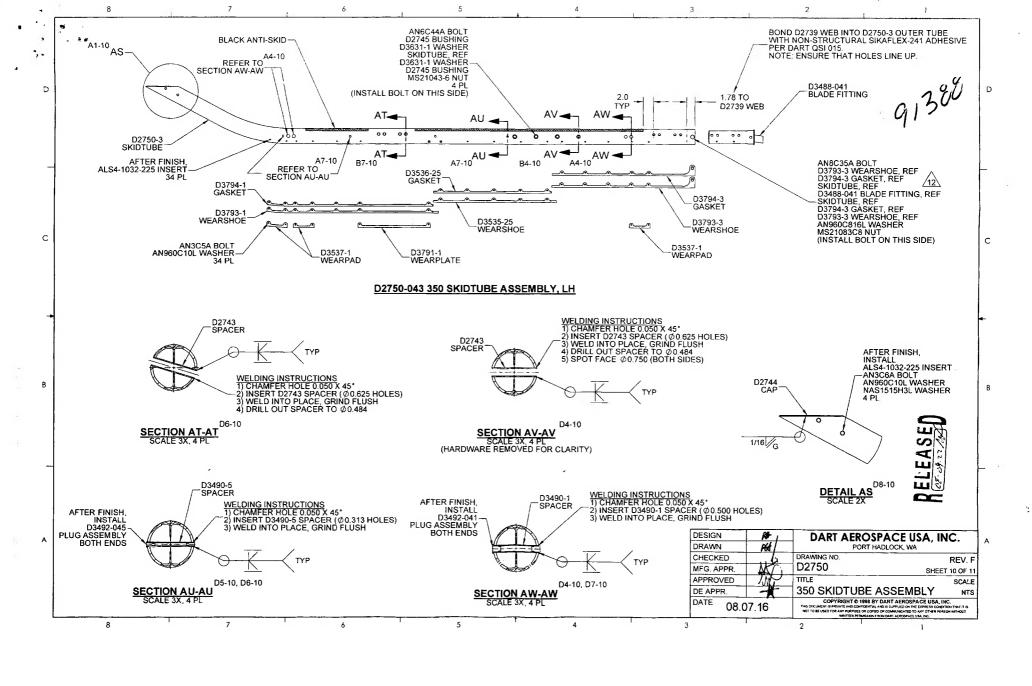


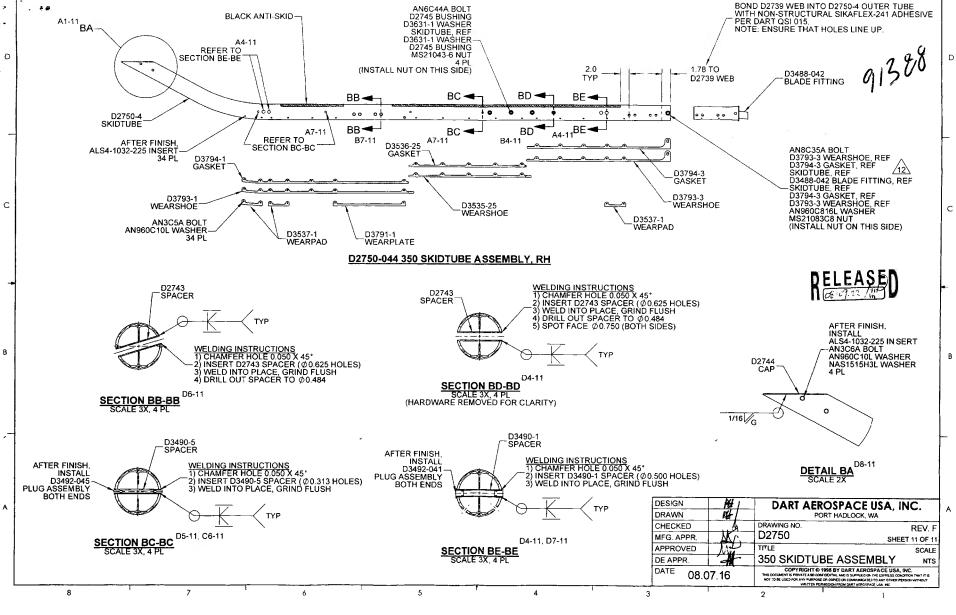
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NO. 306

AWS D17.1.2001 QUALIFICATION TEST RECORD

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|-------------------------------|----|-------|----|------------------------------|---|----------|----|---|
| Name: Barday Elliott | | - | - | | | 1 | 11 | - |
| Job #: 90946 0 | | | | | | | : | |
| Part #: 0350 - 636-011 | | | | - 1 2 2 2 2 2 | ~ | i, | | |
| Description: Skid tube | | i | | | : | <u>:</u> | | |
| Welding Process: Tig[// Mig[] | 1- | | | 1 | | ì | | |
| Base materiel: Aluminium | | 1 | | | | i | i | |
| Current: AC[V DC[] | | 1 | | | | | | |

TEST REQUIREMENTS AND RESULTS

| Visual: | | pass[/] | fail[] | | | |
|--------------------------------|---|------------|------------|-----|-------|------|
| Incomplete Penetration: | | pass[] | fail[] | | | |
| Incomplete Fusion: | | pass[/ | fail[] | | | |
| Cracks: | | pass[| fail[] | | | |
| Overlap (cold lap) | | pass[] | fail[] | | | |
| Undercut: | | pass[] | fail[] | | | |
| Pin holes: | | pass[-} | fail[] | | | |
| Porosity (surface): | | pass[] | fail[] | | | |
| Coloration: | | pass[| fail[] | | | |
| Burn through: | | pass[/] | fail[] | | | . 53 |
| 0100 | | | | | | |
| Qualifier / A. //wh | | Date of Te | st Coupon | 12- | 10-19 | |
| Welder Broken Ellion | 1 | Date of To | est Coupon | 12- | 10-12 | |
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The above named individual is qualified in accordance with AWS D17.1.2001 to weld